About the Tutorial

HTML stands for Hyper Text Markup Language, which is the most widely used language on Web to develop web pages.

HTML was created by Berners-Lee in late 1991 but "HTML 2.0" was the first standard HTML specification which was published in 1995. HTML 4.01 was a major version of HTML and it was published in late 1999. Though HTML 4.01 version is widely used but currently we are having HTML-5 version which is an extension to HTML 4.01, and this version was published in 2012.

Audience

This tutorial is designed for the aspiring Web Designers and Developers with a need to understand the HTML in enough detail along with its simple overview, and practical examples. This tutorial will give you enough ingredients to start with HTML from where you can take yourself at higher level of expertise.

Prerequisites

Before proceeding with this tutorial you should have a basic working knowledge with Windows or Linux operating system, additionally you must be familiar with:

- Experience with any text editor like notepad, notepad++, or Edit plus etc.
- How to create directories and files on your computer.
- How to navigate through different directories.
- How to type content in a file and save them on a computer.
- Understanding about images in different formats like JPEG, PNG format.

Copyright & Disclaimer

© Copyright 2015 by Tutorials Point (I) Pvt. Ltd.

All the content and graphics published in this e-book are the property of Tutorials Point (I) Pvt. Ltd. The user of this e-book is prohibited to reuse, retain, copy, distribute or republish any contents or a part of contents of this e-book in any manner without written consent of the publisher.

We strive to update the contents of our website and tutorials as timely and as precisely as possible, however, the contents may contain inaccuracies or errors. Tutorials Point (I) Pvt. Ltd. provides no guarantee regarding the accuracy, timeliness or completeness of our website or its contents including this tutorial. If you discover any errors on our website or in this tutorial, please notify us at contact@tutorialspoint.com.
# Table of Contents

About the Tutorial .................................................................................................................. i

Audience .................................................................................................................................. i

Prerequisites ........................................................................................................................... i

Copyright & Disclaimer ......................................................................................................... i

Table of Contents .................................................................................................................... ii

1. HTML – OVERVIEW ........................................................................................................... 1

   Basic HTML Document ..................................................................................................... 1

   HTML Tags ......................................................................................................................... 2

   HTML Document Structure ............................................................................................. 3

   The <!DOCTYPE> Declaration .......................................................................................... 3

2. HTML – BASIC TAGS ......................................................................................................... 4

   Heading Tags ...................................................................................................................... 4

   Paragraph Tag .................................................................................................................... 5

   Line Break Tag .................................................................................................................. 5

   Centering Content ............................................................................................................. 6

   Horizontal Lines ............................................................................................................... 6

   Preserve Formatting .......................................................................................................... 7

   Nonbreaking Spaces ......................................................................................................... 8

3. HTML – ELEMENTS ............................................................................................................ 9

   HTML Tag vs. Element ...................................................................................................... 9

   Nested HTML Elements .................................................................................................. 9

4. HTML – ATTRIBUTES ....................................................................................................... 11

   Core Attributes ................................................................................................................. 12

   Internationalization Attributes ...................................................................................... 13

   The xml:lang Attribute ................................................................................................. 15
5. **HTML – FORMATTING** ................................................................................................................. 17
   - **Bold Text** .............................................................................................................................. 17
   - **Italic Text** ............................................................................................................................. 17
   - **Underlined Text** .................................................................................................................... 18
   - **Strike Text** ............................................................................................................................ 18
   - **Monospaced Font** .................................................................................................................. 19
   - **Superscript Text** .................................................................................................................... 19
   - **Subscript Text** ....................................................................................................................... 20
   - **Inserted Text** ......................................................................................................................... 20
   - **Deleted Text** .......................................................................................................................... 21
   - **Larger Text** ............................................................................................................................ 21
   - **Smaller Text** .......................................................................................................................... 22
   - **Grouping Content** .................................................................................................................. 22

6. **HTML – PHRASE TAGS** ................................................................................................................ 24
   - **Emphasized Text** ..................................................................................................................... 24
   - **Marked Text** ........................................................................................................................... 24
   - **Strong Text** ............................................................................................................................ 25
   - **Text Abbreviation** ................................................................................................................... 25
   - **Acronym Element** ................................................................................................................... 26
   - **Text Direction** ....................................................................................................................... 26
   - **Special Terms** ........................................................................................................................ 27
   - **Quoting Text** .......................................................................................................................... 27
   - **Short Quotations** .................................................................................................................... 28
   - **Text Citations** ........................................................................................................................ 28
   - **Computer Code** ..................................................................................................................... 29
   - **Keyboard Text** ........................................................................................................................ 29
   - **Programming Variables** ......................................................................................................... 30
Program Output ............................................................................................................. 30
Address Text .................................................................................................................. 31

7. HTML – META TAGS .................................................................................................. 32
Adding Meta Tags to Your Documents ............................................................................. 32
Specifying Keywords ....................................................................................................... 32
Document Description ..................................................................................................... 33
Document Revision Date ................................................................................................. 33
Document Refreshing ........................................................................................................ 34
Page Redirection .............................................................................................................. 35
Setting Cookies ................................................................................................................ 35
Setting Author Name ....................................................................................................... 36
Specify Character Set ..................................................................................................... 36

8. HTML – COMMENTS .................................................................................................. 38
Valid vs Invalid Comments ............................................................................................. 38
Multiline Comments ........................................................................................................ 39
Conditional Comments .................................................................................................. 40
Using Comment Tag ........................................................................................................ 40
Commenting Script Code ............................................................................................... 41
Commenting Style Sheets ............................................................................................... 41

9. HTML – IMAGES ..................................................................................................... 43
Insert Image ..................................................................................................................... 43
Set Image Location .......................................................................................................... 44
Set Image Width/Height ................................................................................................. 44
Set Image Border ............................................................................................................. 45
Set Image Alignment ....................................................................................................... 46
Free Web Graphics ......................................................................................................... 46
10. HTML – TABLES ...........................................................................................................47
    Table Heading ............................................................................................................48
    Cellpadding and Cellspacing Attributes ...............................................................49
    Colspan and Rowspan Attributes .......................................................................50
    Tables Backgrounds ...............................................................................................50
    Table Height and Width ..........................................................................................52
    Table Caption ..........................................................................................................53
    Table Header, Body, and Footer ..........................................................................54
    Nested Tables ..........................................................................................................55

11. HTML – LISTS .............................................................................................................57
    HTML Unordered Lists .............................................................................................57
    The type Attribute ..................................................................................................58
    HTML Ordered Lists ...............................................................................................60
    The type Attribute ..................................................................................................60
    The start Attribute ..................................................................................................64
    HTML Definition Lists ............................................................................................64

12. HTML – TEXT LINKS ...............................................................................................66
    Linking Documents ..................................................................................................66
    The target Attribute ................................................................................................66
    Use of Base Path .......................................................................................................67
    Linking to a Page Section .......................................................................................68
    Setting Link Colors ................................................................................................69
    Download Links .......................................................................................................69
    File Download Dialog Box ......................................................................................70

13. HTML – IMAGE LINKS ...........................................................................................71
    Mouse-Sensitive Images .........................................................................................71
Description ........................................................................................................... 165
HTML <audio> Tag .................................................................................................. 166
HTML <b> Tag ....................................................................................................... 167
HTML <base> Tag ............................................................................................... 168
HTML <basefont> Tag .......................................................................................... 169
HTML <bdo> Tag .................................................................................................. 171
HTML <bdi> Tag ................................................................................................... 172
HTML <bgsound> Tag ......................................................................................... 173
HTML <big> Tag .................................................................................................. 174
HTML blink Tag ................................................................................................. 175
HTML <blockquote> Tag ...................................................................................... 176
HTML <body> Tag ............................................................................................... 177
HTML <br> Tag ................................................................................................... 178
HTML Button Tag .............................................................................................. 178
HTML <canvas> Tag ........................................................................................... 179
HTML <caption> Tag ............................................................................................ 181
HTML <center> Tag ............................................................................................ 182
HTML <cite> Tag ................................................................................................ 184
HTML <code> Tag ............................................................................................... 184
HTML <col> Tag ................................................................................................. 185
HTML colgroup Tag .......................................................................................... 186
HTML <comment> and <!——> Tag ...................................................................... 188
HTML <datalist> Tag .......................................................................................... 190
HTML <dd> Tag .................................................................................................. 190
HTML <del> Tag ................................................................................................ 191
HTML <dfn> Tag ................................................................................................ 191
HTML <dialog> tag ............................................................................................ 192
HTML <div> Tag ............................................................................................... 192
HTML <dl> Tag .................................................................................................. 193
HTML <dt> Tag .................................................................................................. 193
HTML <em> Tag .................................................................................................. 194
HTML <embed> Tag ........................................................................................... 195
HTML <fieldset> Tag ........................................................................................ 195
HTML <figure> Tag ............................................................................................ 195
HTML <footer> Tag ............................................................................................ 195
HTML <form> Tag .............................................................................................. 195
HTML <frame> Tag ............................................................................................ 195
HTML <frameset> Tag ........................................................................................ 195
HTML <galery> Tag ............................................................................................ 195
HTML <head> Tag ............................................................................................... 196
HTML <header> Tag ............................................................................................ 196
HTML <hgroup> Tag ............................................................................................ 196
HTML <hr> Tag .................................................................................................. 197
HTML <html> Tag ............................................................................................... 197
HTML <i> Tag ...................................................................................................... 197
HTML <img> Tag ............................................................................................... 197
HTML <input> Tag ............................................................................................ 198
HTML <ins> Tag .................................................................................................. 199
HTML <isindex> Tag ........................................................................................... 199
HTML <label> Tag ............................................................................................... 199
HTML <legend> Tag .............................................................................................. 200
HTML <link> Tag ............................................................................................... 200
HTML <map> Tag ............................................................................................... 201
HTML <menu> Tag ............................................................................................... 201
HTML <meta> Tag ............................................................................................... 202
HTML <meter> Tag .............................................................................................. 202
HTML <nav> Tag ................................................................................................ 202
HTML <noembed> Tag ........................................................................................ 203
HTML <noframes> Tag ........................................................................................ 203
HTML <noscript> Tag .......................................................................................... 203
HTML <object> Tag ........................................................................................... 203
HTML <ol> Tag .................................................................................................... 204
HTML <optgroup> Tag ........................................................................................ 204
HTML <output> Tag ............................................................................................ 204
HTML <p> Tag ...................................................................................................... 205
HTML <param> Tag ............................................................................................. 205
HTML <picture> Tag ........................................................................................... 205
HTML <pre> Tag ................................................................................................ 206
HTML <progress> Tag ........................................................................................ 206
HTML <q> Tag ...................................................................................................... 207
HTML <ruby> Tag ............................................................................................... 207
HTML <s> Tag ...................................................................................................... 207
HTML <samp> Tag ............................................................................................... 208
HTML <script> Tag ............................................................................................. 208
HTML <select> Tag ............................................................................................. 209
HTML <seal> Tag ................................................................................................ 209
HTML <section> Tag ............................................................................................ 209
HTML <small> Tag ............................................................................................... 210
HTML <source> Tag ............................................................................................. 210
HTML <span> Tag ................................................................................................ 210
HTML <strong> Tag ............................................................................................... 210
HTML <style> Tag ............................................................................................... 211
HTML <sub> Tag .................................................................................................. 211
HTML <summary> Tag ........................................................................................ 211
HTML <sup> Tag .................................................................................................. 211
HTML <table> Tag .............................................................................................. 212
HTML <tbody> Tag .............................................................................................. 212
HTML <td> Tag .................................................................................................... 212
HTML <textarea> Tag ........................................................................................ 213
HTML <tfoot> Tag ............................................................................................. 213
HTML <th> Tag .................................................................................................... 213
HTML <thead> Tag ............................................................................................. 213
HTML <th> Tag .................................................................................................... 213
HTML <thead> Tag ............................................................................................. 213
HTML <title> Tag ............................................................................................... 214
HTML <tt> Tag .................................................................................................... 214
HTML <tfoot> Tag ............................................................................................. 215
HTML <u> Tag ...................................................................................................... 215
HTML <ul> Tag .................................................................................................... 215
HTML <var> Tag .................................................................................................. 216
HTML <video> Tag .............................................................................................. 216
HTML <wbr> Tag .................................................................................................. 216
HTML <xmp> Tag ................................................................................................. 217
HTML <yimg> Tag ............................................................................................... 217
HTML <z-index> Tag ............................................................................................ 217
HTML <zoom> Tag ............................................................................................... 217

 tutorialspoint
 SIMPLY EASY LEARNING

 X
HTML

HTML <dir> Tag .................................................................196

HTML div Tag ......................................................................198

HTML <dl> Tag .................................................................199

HTML <dt> Tag ..................................................................201

HTML <em> Tag ................................................................202

HTML <embed> Tag .............................................................203

HTML <fieldset> Tag ............................................................204

HTML Figcaption Tag ............................................................206

HTML Figure Tag ................................................................207

HTML <font> Tag .................................................................208

HTML Footer Tag ................................................................209

HTML <form> Tag ................................................................210

HTML <frame> Tag ...............................................................212

HTML <frameset> Tag ............................................................214

HTML <h1> to <h6> Tag ..........................................................216

HTML <head> Tag ................................................................217

HTML Header Tag .................................................................218

HTML <hr> Tag ................................................................219

HTML <html> Tag .................................................................220

HTML <i> Tag ................................................................221

HTML <iframe> Tag ...............................................................222

HTML <ilayer> Tag .................................................................224

HTML <img> Tag ................................................................227

HTML <input> Tag ...............................................................229

HTML <ins> Tag ................................................................233

HTML <isindex> tag .............................................................235

HTML <kbd> Tag ................................................................236
<table>
<thead>
<tr>
<th>HTML Tag</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTML keygen Tag</td>
<td>236</td>
</tr>
<tr>
<td>HTML <code>&lt;label&gt;</code> Tag</td>
<td>238</td>
</tr>
<tr>
<td>HTML <code>&lt;layer&gt;</code> Tag</td>
<td>239</td>
</tr>
<tr>
<td>HTML <code>&lt;legend&gt;</code> Tag</td>
<td>242</td>
</tr>
<tr>
<td>HTML <code>&lt;li&gt;</code> Tag</td>
<td>243</td>
</tr>
<tr>
<td>HTML <code>&lt;link&gt;</code> Tag</td>
<td>245</td>
</tr>
<tr>
<td>HTML Main Tag</td>
<td>248</td>
</tr>
<tr>
<td>HTML <code>&lt;map&gt;</code> Tag</td>
<td>249</td>
</tr>
<tr>
<td>HTML Mark Tag</td>
<td>250</td>
</tr>
<tr>
<td>HTML <code>&lt;marquee&gt;</code> Tag</td>
<td>251</td>
</tr>
<tr>
<td>HTML <code>&lt;menu&gt;</code> Tag</td>
<td>253</td>
</tr>
<tr>
<td>HTML <code>&lt;menuitem&gt;</code> tag</td>
<td>254</td>
</tr>
<tr>
<td>HTML <code>&lt;meta&gt;</code> tag</td>
<td>256</td>
</tr>
<tr>
<td>HTML <code>&lt;meter&gt;</code> Tag</td>
<td>257</td>
</tr>
<tr>
<td>HTML <code>&lt;multicol&gt;</code> tag</td>
<td>259</td>
</tr>
<tr>
<td>HTML <code>&lt;nav&gt;</code> Tag</td>
<td>260</td>
</tr>
<tr>
<td>HTML <code>&lt;nobr&gt;</code> Tag</td>
<td>261</td>
</tr>
<tr>
<td>HTML <code>&lt;noembed&gt;</code> Tag</td>
<td>262</td>
</tr>
<tr>
<td>HTML <code>&lt;noframes&gt;</code> Tag</td>
<td>263</td>
</tr>
<tr>
<td>HTML <code>&lt;noscript&gt;</code> Tag</td>
<td>264</td>
</tr>
<tr>
<td>HTML <code>&lt;object&gt;</code> Tag</td>
<td>265</td>
</tr>
<tr>
<td>HTML <code>&lt;ol&gt;</code> Tag</td>
<td>267</td>
</tr>
<tr>
<td>HTML <code>&lt;optgroup&gt;</code> Tag</td>
<td>269</td>
</tr>
<tr>
<td>HTML <code>&lt;option&gt;</code> Tag</td>
<td>270</td>
</tr>
<tr>
<td>HTML <code>&lt;output&gt;</code> Tag</td>
<td>272</td>
</tr>
<tr>
<td>HTML <code>&lt;p&gt;</code> Tag</td>
<td>273</td>
</tr>
<tr>
<td>HTML <code>&lt;param&gt;</code> Tag</td>
<td>274</td>
</tr>
</tbody>
</table>
HTML

HTML <th> Tag ........................................................................................................314
HTML <thead> Tag ..................................................................................................316
HTML <time> tag ....................................................................................................319
HTML <title> Tag ....................................................................................................320
HTML <tr> Tag ..........................................................................................................321
HTML <track> tag ....................................................................................................323
HTML <tt> Tag .........................................................................................................324
HTML <u> Tag ...........................................................................................................325
HTML <ul> Tag .........................................................................................................326
HTML <var> Tag .......................................................................................................328
HTML <video> Tag ....................................................................................................328
HTML <wbr> Tag .......................................................................................................330
HTML <xmp> Tag .......................................................................................................331

29. HTML – ATTRIBUTE REFERENCE ......................................................................333
   Global Attributes ....................................................................................................333
   Language Attributes ..............................................................................................334

30. HTML EVENTS REFERENCE ............................................................................335
   Window Events Attributes ....................................................................................335
   Form Events ...........................................................................................................336
   Keyboard Events ....................................................................................................337
   Mouse Events .........................................................................................................337
   Media Events ..........................................................................................................338

31. HTML – FONTS REFERENCE ............................................................................341
   Fonts for Microsoft Systems ..................................................................................342
   Fonts for Macintosh Systems ..................................................................................343
   Fonts for Unix Systems ..........................................................................................344

xiv
HTML stands for **Hypertext Markup Language**, and it is the most widely used language to write Web Pages.

- **Hypertext** refers to the way in which Web pages (HTML documents) are linked together. Thus, the link available on a webpage is called Hypertext.

- As its name suggests, HTML is a **Markup Language** which means you use HTML to simply "mark-up" a text document with tags that tell a Web browser how to structure it to display.

Originally, HTML was developed with the intent of defining the structure of documents like headings, paragraphs, lists, and so forth to facilitate the sharing of scientific information between researchers.

Now, HTML is being widely used to format web pages with the help of different tags available in HTML language.

### Basic HTML Document

In its simplest form, following is an example of an HTML document:

```html
<!DOCTYPE html>
<html>
  <head>
    <title>This is document title</title>
  </head>
  <body>
    <h1>This is a heading</h1>
    <p>Document content goes here.....</p>
  </body>
</html>
```

Either you can use **Try it** option available at the top right corner of the code box to check the result of this HTML code, or let's save it in an HTML file `test.htm` using your favorite text editor. Finally open it using a web browser like Internet Explorer or Google Chrome, or Firefox etc. It must show the following output:
As told earlier, HTML is a markup language and makes use of various tags to format the content. These tags are enclosed within angle braces <Tag Name>. Except few tags, most of the tags have their corresponding closing tags. For example, <html> has its closing tag </html> and <body> tag has its closing tag </body> tag etc.

Above example of HTML document uses the following tags:

<table>
<thead>
<tr>
<th>Tag</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;!DOCTYPE...&gt;</td>
<td>This tag defines the document type and HTML version.</td>
</tr>
<tr>
<td>&lt;html&gt;</td>
<td>This tag encloses the complete HTML document and mainly comprises of document header which is represented by &lt;head&gt;... &lt;/head&gt; and document body which is represented by &lt;body&gt;... &lt;/body&gt; tags.</td>
</tr>
<tr>
<td>&lt;head&gt;</td>
<td>This tag represents the document's header which can keep other HTML tags like &lt;title&gt;, &lt;link&gt; etc.</td>
</tr>
<tr>
<td>&lt;title&gt;</td>
<td>The &lt;title&gt; tag is used inside the &lt;head&gt; tag to mention the document title.</td>
</tr>
<tr>
<td>&lt;body&gt;</td>
<td>This tag represents the document's body which keeps other HTML tags like &lt;h1&gt;, &lt;div&gt;, &lt;p&gt; etc.</td>
</tr>
<tr>
<td>&lt;h1&gt;</td>
<td>This tag represents the heading.</td>
</tr>
<tr>
<td>&lt;p&gt;</td>
<td>This tag represents a paragraph.</td>
</tr>
</tbody>
</table>
To learn HTML, you will need to study various tags and understand how they behave, while formatting a textual document. Learning HTML is simple as users have to learn the usage of different tags in order to format the text or images to make a beautiful webpage.

World Wide Web Consortium (W3C) recommends to use lowercase tags starting from HTML 4.

**HTML Document Structure**

A typical HTML document will have the following structure:

```
<!DOCTYPE html>
<html>
  <head>
    Document header related tags
  </head>
  <body>
    Document body related tags
  </body>
</html>
```

We will study all the header and body tags in subsequent chapters, but for now let's see what is document declaration tag.

**The `<!DOCTYPE>` Declaration**

The `<!DOCTYPE>` declaration tag is used by the web browser to understand the version of the HTML used in the document. Current version of HTML is 5 and it makes use of the following declaration:

```
<!DOCTYPE html>
```

There are many other declaration types which can be used in HTML document depending on what version of HTML is being used. We will see more details on this while discussing `<!DOCTYPE...>` tag along with other HTML tags.
Heading Tags

Any document starts with a heading. You can use different sizes for your headings. HTML also has six levels of headings, which use the elements `<h1>`, `<h2>`, `<h3>`, `<h4>`, `<h5>`, and `<h6>`. While displaying any heading, browser adds one line before and one line after that heading.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>Heading Example</title>
</head>
<body>
<h1>This is heading 1</h1>
<h2>This is heading 2</h2>
<h3>This is heading 3</h3>
<h4>This is heading 4</h4>
<h5>This is heading 5</h5>
<h6>This is heading 6</h6>
</body>
</html>
```

This will produce the following result:

**This is heading 1**

**This is heading 2**

**This is heading 3**

**This is heading 4**

**This is heading 5**

**This is heading 6**
**Paragraph Tag**

The `<p>` tag offers a way to structure your text into different paragraphs. Each paragraph of text should go in between an opening `<p>` and a closing `</p>` tag as shown below in the example:

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Paragraph Example</title>
</head>
<body>
<p>Here is a first paragraph of text.</p>
<p>Here is a second paragraph of text.</p>
<p>Here is a third paragraph of text.</p>
</body>
</html>
```

This will produce the following result:

Here is a first paragraph of text.
Here is a second paragraph of text.
Here is a third paragraph of text.

**Line Break Tag**

Whenever you use the `<br />` element, anything following it starts from the next line. This tag is an example of an empty element, where you do not need opening and closing tags, as there is nothing to go in between them.

The `<br />` tag has a space between the characters `br` and the forward slash. If you omit this space, older browsers will have trouble rendering the line break, while if you miss the forward slash character and just use `<br>` it is not valid in XHTML.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Line Break Example</title>
</head>
<body>
</body>
</html>
```
Hello<br />
You delivered your assignment on time.<br />
Thanks<br />
Mahnaz</p>
</body>
</html>

This will produce the following result:

Hello
You delivered your assignment on time.
Thanks
Mahnaz

Centering Content

You can use <center> tag to put any content in the center of the page or any table cell.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>Centring Content Example</title>
</head>
<body>
<p>This text is not in the center.</p>
<center>
<p>This text is in the center.</p>
</center>
</body>
</html>
```

This will produce the following result:

This text is not in the center.

This text is in the center.

Horizontal Lines

Horizontal lines are used to visually break-up sections of a document. The <hr> tag creates a line from the current position in the document to the right margin and breaks the line accordingly.
For example, you may want to give a line between two paragraphs as in the given example below:

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Horizontal Line Example</title>
</head>
<body>
<p>This is paragraph one and should be on top</p>
<hr/>
<p>This is paragraph two and should be at bottom</p>
</body>
</html>
```

This will produce the following result:

This is paragraph one and should be on top

This is paragraph two and should be at bottom

Again `<hr />` tag is an example of the *empty* element, where you do not need opening and closing tags, as there is nothing to go in between them.

The `<hr />` element has a space between the characters `hr` and the forward slash. If you omit this space, older browsers will have trouble rendering the horizontal line, while if you miss the forward slash character and just use `<hr>` it is not valid in XHTML.

**Preserve Formatting**

Sometimes, you want your text to follow the exact format of how it is written in the HTML document. In these cases, you can use the preformatted tag `<pre>`.

Any text between the opening `<pre>` tag and the closing `</pre>` tag will preserve the formatting of the source document.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Preserve Formatting Example</title>
</head>
</html>
```
This will produce the following result:

```javascript
function testFunction( strText ){
    alert (strText)
}
```

Try using the same code without keeping it inside `<pre>...</pre>` tags

**Nonbreaking Spaces**

Suppose you want to use the phrase "12 Angry Men." Here, you would not want a browser to split the "12, Angry" and "Men" across two lines:

An example of this technique appears in the movie "12 Angry Men."

In cases, where you do not want the client browser to break text, you should use a nonbreaking space entity `&nbsp;` instead of a normal space. For example, when coding the "12 Angry Men" in a paragraph, you should use something similar to the following code:

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Nonbreaking Spaces Example</title>
</head>
<body>
<p>An example of this technique appears in the movie "12&nbsp;Angry&nbsp;Men."
</p>
</body>
</html>
```
An **HTML element** is defined by a starting tag. If the element contains other content, it ends with a closing tag, where the element name is preceded by a forward slash as shown below with few tags:

<table>
<thead>
<tr>
<th>Start Tag</th>
<th>Content</th>
<th>End Tag</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;p&gt;</td>
<td>This is paragraph content.</td>
<td>&lt;/p&gt;</td>
</tr>
<tr>
<td>&lt;h1&gt;</td>
<td>This is heading content.</td>
<td>&lt;/h1&gt;</td>
</tr>
<tr>
<td>&lt;div&gt;</td>
<td>This is division content.</td>
<td>&lt;/div&gt;</td>
</tr>
<tr>
<td>&lt;br /&gt;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

So here `<p>`....`</p>` is an HTML element, `<h1>`...`</h1>` is another HTML element. There are some HTML elements which don't need to be closed, such as `<img.../>`, `<hr />` and `<br />` elements. These are known as **void elements**.

HTML documents consist of a tree of these elements and they specify how HTML documents should be built, and what kind of content should be placed in what part of an HTML document.

**HTML Tag vs. Element**

An HTML element is defined by a *starting tag*. If the element contains other content, it ends with a *closing tag*.

For example, `<p>` is starting tag of a paragraph and `</p>` is closing tag of the same paragraph but `<p>This is paragraph</p>` is a paragraph element.

**Nested HTML Elements**

It is very much allowed to keep one HTML element inside another HTML element:

**Example**

```html
<!DOCTYPE html>
<html>
<head>
</head>
</html>
```
This is *italic* heading
This is *underlined* paragraph
We have seen few HTML tags and their usage like heading tags <h1>, <h2>, paragraph tag <p> and other tags. We used them so far in their simplest form, but most of the HTML tags can also have attributes, which are extra bits of information.

An attribute is used to define the characteristics of an HTML element and is placed inside the element's opening tag. All attributes are made up of two parts: a name and a value:

- The name is the property you want to set. For example, the paragraph <p> element in the example carries an attribute whose name is align, which you can use to indicate the alignment of paragraph on the page.

- The value is what you want the value of the property to be set and always put within quotations. The below example shows three possible values of align attribute: left, center and right.

Attribute names and attribute values are case-insensitive. However, the World Wide Web Consortium (W3C) recommends lowercase attributes/attribute values in their HTML 4 recommendation.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Align Attribute Example</title>
</head>
<body>
<p align="left">This is left aligned</p>
<p align="center">This is center aligned</p>
<p align="right">This is right aligned</p>
</body>
</html>
```

This will display the following result:

This is left aligned

This is center aligned

This is right aligned
Core Attributes

The four core attributes that can be used on the majority of HTML elements (although not all) are:

- Id
- Title
- Class
- Style

The Id Attribute

The id attribute of an HTML tag can be used to uniquely identify any element within an HTML page. There are two primary reasons that you might want to use an id attribute on an element:

- If an element carries an id attribute as a unique identifier, it is possible to identify just that element and its content.
- If you have two elements of the same name within a Web page (or style sheet), you can use the id attribute to distinguish between elements that have the same name.

We will discuss style sheet in separate tutorial. For now, let’s use the id attribute to distinguish between two paragraph elements as shown below.

Example

```html
<p id="html">This para explains what is HTML</p>
<p id="css">This para explains what is Cascading Style Sheet</p>
```

The title Attribute

The title attribute gives a suggested title for the element. They syntax for the title attribute is similar as explained for id attribute:

The behavior of this attribute will depend upon the element that carries it, although it is often displayed as a tooltip when cursor comes over the element or while the element is loading.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>The title Attribute Example</title>
</head>
<body>
<h3 title="Hello HTML!">Titled Heading Tag Example</h3>
</body>
</html>
```
This will produce the following result:

### Titled Heading Tag Example

Now try to bring your cursor over "Titled Heading Tag Example" and you will see that whatever title you used in your code is coming out as a tooltip of the cursor.

**The class Attribute**

The **class** attribute is used to associate an element with a style sheet, and specifies the class of element. You will learn more about the use of the class attribute when you will learn Cascading Style Sheet (CSS). So for now you can avoid it.

The value of the attribute may also be a space-separated list of class names. For example:

```html
class="className1 className2 className3"
```

**The style Attribute**

The style attribute allows you to specify Cascading Style Sheet (CSS) rules within the element.

```html
<!DOCTYPE html>
<html>
<head>
<title>The style Attribute</title>
</head>
<body>
<p style="font-family:arial; color:#FF0000;">Some text...</p>
</body>
</html>
```

This will produce the following result:

Some text...

At this point of time, we are not learning CSS, so just let's proceed without bothering much about CSS. Here, you need to understand what are HTML attributes and how they can be used while formatting content.

**Internationalization Attributes**

There are three internationalization attributes, which are available for most (although not all) XHTML elements.
The **dir** Attribute

The **dir** attribute allows you to indicate to the browser about the direction in which the text should flow. The **dir** attribute can take one of two values, as you can see in the table that follows:

<table>
<thead>
<tr>
<th>Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ltr</td>
<td>Left to right (the default value)</td>
</tr>
<tr>
<td>rtl</td>
<td>Right to left (for languages such as Hebrew or Arabic that are read right to left)</td>
</tr>
</tbody>
</table>

**Example**

```html
<!DOCTYPE html>
<html dir="rtl">
<head>
<title>Display Directions</title>
</head>
<body>
This is how IE 5 renders right-to-left directed text.
</body>
</html>
```

This will produce the following result:

This is how IE 5 renders right-to-left directed text.

When **dir** attribute is used within the **<html>** tag, it determines how text will be presented within the entire document. When used within another tag, it controls the text's direction for just the content of that tag.

The **lang** Attribute

The **lang** attribute allows you to indicate the main language used in a document, but this attribute was kept in HTML only for backwards compatibility with earlier versions of HTML. This attribute has been replaced by the **xml:lang** attribute in new XHTML documents.

The values of the **lang** attribute are ISO-639 standard two-character language codes. Check [HTML Language Codes: ISO 639](https://www.w3.org/International/questions/qa-xml-lang-values) for a complete list of language codes.
Example

```html
<!DOCTYPE html>
<html lang="en">
<head>
<title>English Language Page</title>
</head>
<body>
This page is using English Language
</body>
</html>
```

The `xml:lang` Attribute

The `xml:lang` attribute is the XHTML replacement for the `lang` attribute. The value of the `xml:lang` attribute should be an ISO-639 country code as mentioned in the previous section.

Generic Attributes

Here’s a table of some other attributes that are readily usable with many of the HTML tags.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Options</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>align</td>
<td>right, left, center</td>
<td>Horizontally aligns tags</td>
</tr>
<tr>
<td>valign</td>
<td>top, middle, bottom</td>
<td>Vertically aligns tags within an HTML element</td>
</tr>
<tr>
<td>bgcolor</td>
<td>numeric, hexadecimal, RGB values</td>
<td>Places a background color behind an element</td>
</tr>
<tr>
<td>background</td>
<td>URL</td>
<td>Places a background image behind an element</td>
</tr>
<tr>
<td>id</td>
<td>User Defined</td>
<td>Names an element for use with Cascading Style Sheets.</td>
</tr>
<tr>
<td>class</td>
<td>User Defined</td>
<td>Classifies an element for use with Cascading Style Sheets.</td>
</tr>
</tbody>
</table>
### HTML Tags

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>width</td>
<td>Numeric Value</td>
<td>Specifies the width of tables, images, or table cells.</td>
</tr>
<tr>
<td>height</td>
<td>Numeric Value</td>
<td>Specifies the height of tables, images, or table cells.</td>
</tr>
<tr>
<td>title</td>
<td>User Defined</td>
<td>&quot;Pop-up&quot; title of the elements.</td>
</tr>
</tbody>
</table>

We will see related examples as we will proceed to study other HTML tags. For a complete list of HTML Tags and related attributes please check reference to [HTML Tags List](#).
If you use a word processor, you must be familiar with the ability to make text bold, italicized, or underlined; these are just three of the ten options available to indicate how text can appear in HTML and XHTML.

**Bold Text**

Anything that appears within `<b>...</b>` element, is displayed in bold as shown below:

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Bold Text Example</title>
</head>
<body>
<p>The following word uses a <b>bold</b> typeface.</p>
</body>
</html>
```

This will produce the following result:

The following word uses a **bold** typeface.

**Italic Text**

Anything that appears within `<i>...</i>` element is displayed in italicized as shown below:

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Italic Text Example</title>
</head>
<body>
<p>The following word uses a <i>italicized</i> typeface.</p>
</body>
</html>
```
This will produce the following result:

The following word uses an italicized typeface.

**Underlined Text**

Anything that appears within `<u>...</u>` element, is displayed with underline as shown below:

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Underlined Text Example</title>
</head>
<body>
<p>The following word uses a <u>underlined</u> typeface.</p>
</body>
</html>
```

This will produce the following result:

The following word uses an **underlined** typeface.

**Strike Text**

Anything that appears within `<strike>...</strike>` element is displayed with strikethrough, which is a thin line through the text as shown below:

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Strike Text Example</title>
</head>
<body>
<p>The following word uses a <strike>strikethrough</strike> typeface.</p>
</body>
</html>
```
This will produce the following result:

The following word uses a strikethrough typeface.

**Monospaced Font**

The content of a `<tt>`...`</tt>` element is written in monospaced font. Most of the fonts are known as variable-width fonts because different letters are of different widths (for example, the letter 'm' is wider than the letter 'i'). In a monospaced font, however, each letter has the same width.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Monospaced Font Example</title>
</head>
<body>
<p>The following word uses a <tt>monospaced</tt> typeface.</p>
</body>
</html>
```

This will produce the following result:

The following word uses a monospaced typeface.

**Superscript Text**

The content of a `<sup>`...`</sup>` element is written in superscript; the font size used is the same size as the characters surrounding it but is displayed half a character's height above the other characters.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Superscript Text Example</title>
</head>
<body>
<p>The following word uses a <sup>superscript</sup> typeface.</p>
</body>
</html>
```
This will produce the following result:

The following word uses a superscript typeface.

Subscript Text

The content of a `<sub>`...`</sub>` element is written in subscript; the font size used is the same as the characters surrounding it, but is displayed half a character's height beneath the other characters.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>Subscript Text Example</title>
</head>
<body>
<p>The following word uses a sub<sub>script</sub> typeface.</p>
</body>
</html>
```

This will produce the following result:

The following word uses a subscript typeface.

Inserted Text

Anything that appears within `<ins>`...`</ins>` element is displayed as inserted text.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>Inserted Text Example</title>
</head>
<body>
<p>I want to drink<br> cola<del>cola</del> wine<ins>wine</ins></p>
</body>
</html>
```
This will produce the following result:

I want to drink cola wine

**Deleted Text**

Anything that appears within `<del>...</del>` element, is displayed as deleted text.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Deleted Text Example</title>
</head>
<body>
<p>I want to drink <del>cola</del> <ins>wine</ins></p>
</body>
</html>
```

This will produce the following result:

I want to drink cola wine

**Larger Text**

The content of the `<big>...</big>` element is displayed one font size larger than the rest of the text surrounding it as shown below:

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Larger Text Example</title>
</head>
<body>
<p>The following word uses a <big>big</big> typeface.</p>
</body>
</html>
```
This will produce the following result:

The following word uses a big typeface.

**Smaller Text**

The content of the `<small>`...`</small>` element is displayed one font size smaller than the rest of the text surrounding it as shown below:

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Smaller Text Example</title>
</head>
<body>
<p>The following word uses a `<small>`small`</small>` typeface.</p>
</body>
</html>
```

This will produce the following result:

The following word uses a small typeface.

**Grouping Content**

The `<div>` and `<span>` elements allow you to group together several elements to create sections or subsections of a page.

For example, you might want to put all of the footnotes on a page within a `<div>` element to indicate that all of the elements within that `<div>` element relate to the footnotes. You might then attach a style to this `<div>` element so that they appear using a special set of style rules.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
</head>
<body>
<title>Div Tag Example</title>
</body>
</html>
```
<div id="menu" align="middle">
<a href="/index.htm">HOME</a> | 
<a href="/about/contact_us.htm">CONTACT</a> | 
<a href="/about/index.htm">ABOUT</a>
</div>

<div id="content" align="left" bgcolor="white">
<h5>CONTENT ARTICLES</h5>
<p>Actual content goes here.....</p>
</div>
</body>
</html>

This will produce the following result:

This is the example of span tag and the div tag along with CSS.

These tags are commonly used with CSS to allow you to attach a style to a section of a page.
6. HTML – PHRASE TAGS

The phrase tags have been desicolgnered for specific purposes, though they are displayed in a similar way as other basic tags like `<b>`, `<i>`, `<pre>`, and `<tt>`, you have seen in previous chapter. This chapter will take you through all the important phrase tags, so let’s start seeing them one by one.

**Emphasized Text**

Anything that appears within `<em>...</em>` element is displayed as emphasized text.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Emphasized Text Example</title>
</head>
<body>
<p>The following word uses a <em>emphasized</em> typeface.</p>
</body>
</html>
```

This will produce the following result:

The following word uses an *emphasized* typeface.

**Marked Text**

Anything that appears within `<mark>...</mark>` element, is displayed as marked with yellow ink.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Marked Text Example</title>
</head>
<body>
<p>The following word has been <mark>marked</mark> with yellow</p>
</body>
</html>
```
This will produce the following result:
The following word has been marked with yellow.

**Strong Text**

Anything that appears within `<strong>...</strong>` element is displayed as important text.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Strong Text Example</title>
</head>
<body>
<p>The following word uses a `<strong>`strong</strong> typeface.</p>
</body>
</html>
```

This will produce the following result:
The following word uses a **strong** typeface.

**Text Abbreviation**

You can abbreviate a text by putting it inside opening `<abbr>` and closing `</abbr>` tags. If present, the title attribute must contain this full description and nothing else.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Text Abbreviation</title>
</head>
<body>
<p>My best friend's name is  <abbr title="Abhishek">Abhy</abbr>.</p>
</body>
</html>
```

This will produce the following result:
My best friend's name is Abhy.

**Acronym Element**

The `<acronym>` element allows you to indicate that the text between `<acronym>` and `</acronym>` tags is an acronym.

At present, the major browsers do not change the appearance of the content of the `<acronym>` element.

**Example**

```
<!DOCTYPE html>
<html>
<head>
<title>Acronym Example</title>
</head>
<body>
<p>This chapter covers marking up text in `<acronym>`XHTML`</acronym>`.</p>
</body>
</html>
```

This will produce the following result:

This chapter covers marking up text in XHTML.

**Text Direction**

The `<bdo>`...`</bdo>` element stands for Bi-Directional Override and it is used to override the current text direction.

**Example**

```
<!DOCTYPE html>
<html>
<head>
<title>Text Direction Example</title>
</head>
<body>
<p>This text will go left to right.</p>
<p>`<bdo dir="rtl">This text will go right to left.</bdo>`</p>
</body>
</html>
```
This will produce the following result:
This text will go left to right.
This text will go right to left.

Special Terms

The `<dfn>...</dfn>` element (or HTML Definition Element) allows you to specify that you are introducing a special term. It’s usage is similar to italic words in the midst of a paragraph.

Typically, you would use the `<dfn>` element the first time you introduce a key term. Most recent browsers render the content of a `<dfn>` element in an italic font.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>Special Terms Example</title>
</head>
<body>
<p>The following word is a <dfn>special</dfn> term.</p>
</body>
</html>
```

This will produce the following result:
The following word is a special term.

Quoting Text

When you want to quote a passage from another source, you should put it in between `<blockquote>...</blockquote>` tags.

Text inside a `<blockquote>` element is usually indented from the left and right edges of the surrounding text, and sometimes uses an italicized font.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>Blockquote Example</title>
</head>
<body>
</body>
</html>
```
The following description of XHTML is taken from the W3C Web site:

XHTML 1.0 is the W3C's first Recommendation for XHTML, following on from earlier work on HTML 4.01, HTML 4.0, HTML 3.2 and HTML 2.0.

This will produce the following result:

XHTML 1.0 is the W3C's first Recommendation for XHTML, following on from earlier work on HTML 4.01, HTML 4.0, HTML 3.2 and HTML 2.0.

**Short Quotations**

The `<q>...</q>` element is used when you want to add a double quote within a sentence.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Double Quote Example</title>
</head>
<body>
<p>Amit is in Spain, <q>I think I am wrong</q>.</p>
</body>
</html>
```

This will produce the following result:

Amit is in Spain, I think I am wrong.

**Text Citations**

If you are quoting a text, you can indicate the source placing it between an opening `<cite>` tag and closing `</cite>` tag.

As you would expect in a print publication, the content of the `<cite>` element is rendered in italicized text by default.

**Example**

```html
<!DOCTYPE html>
<html>
```
Any programming code to appear on a Web page should be placed inside `<code>...</code>` tags. Usually the content of the `<code>` element is presented in a monospaced font, just like the code in most programming books.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Computer Code Example</title>
</head>
<body>
<p>Regular text. <code>This is code.</code> Regular text.</p>
</body>
</html>
```

This will produce the following result:

Regular text. This is code. Regular text.

**Keyboard Text**

When you are talking about computers, if you want to tell a reader to enter some text, you can use the `<kbd>...</kbd>` element to indicate what should be typed in, as in this example.

**Example**

```html
<!DOCTYPE html>
<html>
```
This will produce the following result:

Regular text. This is inside kbd element Regular text.

**Programming Variables**

This element is usually used in conjunction with the `<pre>` and `<code>` elements to indicate that the content of that element is a variable.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Variable Text Example</title>
</head>
<body>
<p><code>document.write("<var>user-name</var>")</code></p>
</body>
</html>
```

This will produce the following result:

document.write("user-name")

**Program Output**

The `<samp>`...`</samp>` element indicates sample output from a program, and script etc. Again, it is mainly used when documenting programming or coding concepts.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Program Output Example</title>
</head>
<body>
</body>
</html>
```
This will produce the following result:

Result produced by the program is **Hello World!**

**Address Text**

The `<address>`...`</address>` element is used to contain any address.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Address Example</title>
</head>
<body>
<address>388A, Road No 22, Jubilee Hills - Hyderabad</address>
</body>
</html>
```

This will produce the following result:

**388A, Road No 22, Jubilee Hills - Hyderabad**
HTML lets you specify metadata - additional important information about a document in a variety of ways. The META elements can be used to include name/value pairs describing properties of the HTML document, such as author, expiry date, a list of keywords, document author etc.

The `<meta>` tag is used to provide such additional information. This tag is an empty element and so does not have a closing tag but it carries information within its attributes.

You can include one or more meta tags in your document based on what information you want to keep in your document but in general, meta tags do not impact physical appearance of the document so from appearance point of view, it does not matter if you include them or not.

### Adding Meta Tags to Your Documents

You can add metadata to your web pages by placing `<meta>` tags inside the header of the document which is represented by `<head>` and `</head>` tags. A meta tag can have following attributes in addition to core attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Name for the property. Can be anything. Examples include, keywords, description, author, revised, generator etc.</td>
</tr>
<tr>
<td>content</td>
<td>Specifies the property's value.</td>
</tr>
<tr>
<td>scheme</td>
<td>Specifies a scheme to interpret the property's value (as declared in the content attribute).</td>
</tr>
<tr>
<td>http-equiv</td>
<td>Used for http response message headers. For example, http-equiv can be used to refresh the page or to set a cookie. Values include content-type, expires, refresh and set-cookie.</td>
</tr>
</tbody>
</table>

### Specifying Keywords

You can use `<meta>` tag to specify important keywords related to the document and later these keywords are used by the search engines while indexing your webpage for searching purpose.

### Example

Following is an example, where we are adding HTML, Meta Tags, Metadata as important keywords about the document.
<!DOCTYPE html>
<html>
<head>
<title>Meta Tags Example</title>
<meta name="keywords" content="HTML, Meta Tags, Metadata" />
</head>
<body>
<p>Hello HTML5!</p>
</body>
</html>

This will produce the following result:

Hello HTML5!

**Document Description**

You can use `<meta>` tag to give a short description about the document. This again can be used by various search engines while indexing your webpage for searching purpose.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Meta Tags Example</title>
<meta name="keywords" content="HTML, Meta Tags, Metadata" />
<meta name="description" content="Learning about Meta Tags." />
</head>
<body>
<p>Hello HTML5!</p>
</body>
</html>
```

**Document Revision Date**

You can use `<meta>` tag to give information about when last time the document was updated. This information can be used by various web browsers while refreshing your webpage.
Example

```html
<!DOCTYPE html>
<html>
<head>
<title>Meta Tags Example</title>
<meta name="keywords" content="HTML, Meta Tags, Metadata" />
<meta name="description" content="Learning about Meta Tags." />
<meta name="revised" content="Tutorialspoint, 3/7/2014" />
</head>
<body>
<p>Hello HTML5!</p>
</body>
</html>
```

Document Refreshing

A `<meta>` tag can be used to specify a duration after which your web page will keep refreshing automatically.

Example

If you want your page keep refreshing after every 5 seconds then use the following syntax.

```html
<!DOCTYPE html>
<html>
<head>
<title>Meta Tags Example</title>
<meta name="keywords" content="HTML, Meta Tags, Metadata" />
<meta name="description" content="Learning about Meta Tags." />
<meta name="revised" content="Tutorialspoint, 3/7/2014" />
<meta http-equiv="refresh" content="5" />
</head>
<body>
<p>Hello HTML5!</p>
</body>
</html>
```
Page Redirection

You can use <meta> tag to redirect your page to any other webpage. You can also specify a duration if you want to redirect the page after a certain number of seconds.

Example

Following is an example of redirecting current page to another page after 5 seconds. If you want to redirect page immediately then do not specify content attribute.

```html
<!DOCTYPE html>
<html>
<head>
<title>Meta Tags Example</title>
<meta name="keywords" content="HTML, Meta Tags, Metadata" />
<meta name="description" content="Learning about Meta Tags." />
<meta name="revised" content="Tutorialspoint, 3/7/2014" />
<meta http-equiv="refresh" content="5; url=http://www.tutorialspoint.com" />
</head>
<body>
<p>Hello HTML5!</p>
</body>
</html>
```

Setting Cookies

Cookies are data, stored in small text files on your computer and it is exchanged between web browser and web server to keep track of various information based on your web application need.

You can use <meta> tag to store cookies on client side and later this information can be used by the Web Server to track a site visitor.

Example

Following is an example of redirecting current page to another page after 5 seconds. If you want to redirect page immediately then do not specify content attribute.

```html
<!DOCTYPE html>
<html>
<head>
<title>Meta Tags Example</title>
<meta name="keywords" content="HTML, Meta Tags, Metadata" />
<meta name="description" content="Learning about Meta Tags." />
<meta name="revised" content="Tutorialspoint, 3/7/2014" />
</head>
```
If you do not include the expiration date and time, the cookie is considered a session cookie and will be deleted when the user exits the browser.

**Note:** You can check [PHP and Cookies](https://www.tutorialspoint.com/php/php_cookies.htm) tutorial for a complete detail on Cookies.

### Setting Author Name

You can set an author name in a web page using meta tag. See an example below:

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Meta Tags Example</title>
<meta name="keywords" content="HTML, Meta Tags, Metadata"/>
<meta name="description" content="Learning about Meta Tags."/>
<meta name="author" content="Mahnaz Mohtashim"/>
</head>
<body>
<p>Hello HTML5!</p>
</body>
</html>
```

### Specify Character Set

You can use `<meta>` tag to specify character set used within the webpage.

**Example**

By default, Web servers and Web browsers use ISO-8859-1 (Latin1) encoding to process Web pages. Following is an example to set UTF-8 encoding:

```html
<!DOCTYPE html>
<html>
<head>
</head>
<body>
<p>Hello HTML5!</p>
</body>
</html>
```
To serve the static page with traditional Chinese characters, the webpage must contain a `<meta>` tag to set Big5 encoding:

```html
<!DOCTYPE html>
<html>
<head>
<title>Meta Tags Example</title>
<meta name="keywords" content="HTML, Meta Tags, Metadata" />
<meta name="description" content="Learning about Meta Tags." />
<meta name="author" content="Mahnaz Mohtashim" />
<meta http-equiv="Content-Type" content="text/html; charset=Big5" />
</head>
<body>
<p>Hello HTML5!</p>
</body>
</html>
```
Comment is a piece of code which is ignored by any web browser. It is a good practice to add comments into your HTML code, especially in complex documents, to indicate sections of a document, and any other notes to anyone looking at the code. Comments help you and others understand your code and increases code readability.

HTML comments are placed in between <!-- --> tags. So, any content placed within <!-- --> tags will be treated as comment and will be completely ignored by the browser.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
    <!-- Document Header Starts -->
    <title>This is document title</title>
    <!-- Document Header Ends -->
</head>
<body>
    <p>Document content goes here.....</p>
</body>
</html>
```

This will produce the following result without displaying the content given as a part of comments:

Document content goes here.....

**Valid vs Invalid Comments**

Comments do not nest which means a comment cannot be put inside another comment. Second the double-dash sequence "--" may not appear inside a comment except as part of the closing --> tag. You must also make sure that there are no spaces in the start-of-comment string.

**Example**

Here, the given comment is a valid comment and will be wiped off by the browser.

```html
<!DOCTYPE html>
<html>
<head>
    <title>Valid Comment Example</title>
</head>
<body>
```

But, following line is not a valid comment and will be displayed by the browser. This is because there is a space between the left angle bracket and the exclamation mark.

```html
<!DOCTYPE html>
<html>
<head>
<title>Invalid Comment Example</title>
</head>
<body>
<!-- This is not a valid comment -->
<p>Document content goes here.....</p>
</body>
</html>
```

This will produce the following result:

```html
<!-- This is not a valid comment -->
Document content goes here.....
```

**Multiline Comments**

So far we have seen single line comments, but HTML supports multi-line comments as well.

You can comment multiple lines by the special beginning tag `<!--` and ending tag `-->` placed before the first line and end of the last line as shown in the given example below.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Multiline Comments</title>
</head>
<body>
<!--
This is a multiline comment and it can span through as many as lines you like.
-->
Conditional Comments

Conditional comments only work in Internet Explorer (IE) on Windows but they are ignored by other browsers. They are supported from Explorer 5 onwards, and you can use them to give conditional instructions to different versions of IE.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>Conditional Comments</title>
</head>
<body>
<p>Document content goes here.....</p>
</body>
</html>
```

You will come across a situation where you will need to apply a different style sheet based on different versions of Internet Explorer, in such situation conditional comments will be helpful.

Using Comment Tag

There are few browsers that support <comment> tag to comment a part of HTML code.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>Using Comment Tag</title>
</head>
<body>
</body>
</html>
```
If you are using IE, then it will produce following result:

This is Internet Explorer.

But if you are not using IE, then it will produce following result:

This is Internet Explorer.

**Commenting Script Code**

Though you will learn JavaScript with HTML, in a separate tutorial, but here you must make a note that if you are using Java Script or VB Script in your HTML code then it is recommended to put that script code inside proper HTML comments so that old browsers can work properly.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Commenting Script Code</title>
<script>
<!--
    document.write("Hello World!")
//-->
</script>
</head>
<body>
<p>Hello , World!</p>
</body>
</html>
```

This will produce the following result:

Hello World!
Hello, World!

**Commenting Style Sheets**

Though you will learn using style sheets with HTML in a separate tutorial, but here you must make a note that if you are using Cascading Style Sheet (CSS) in your HTML code
then it is recommended to put that style sheet code inside proper HTML comments so that old browsers can work properly.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>Commenting Style Sheets</title>
<style>
!---
.example {
   border:1px solid #4a7d49;
}
//-->
</style>
</head>
<body>
<div class="example">Hello, World!</div>
</body>
</html>
```

This will produce the following result:

```
Hello, World!
```
Images are very important to beautify as well as to depict many complex concepts in simple way on your web page. This tutorial will take you through simple steps to use images in your web pages.

**Insert Image**

You can insert any image in your web page by using `<img>` tag. Following is the simple syntax to use this tag.

```html
<img src="Image URL" ... attributes-list/>
```

The `<img>` tag is an empty tag, which means that, it can contain only list of attributes and it has no closing tag.

**Example**

To try following example, let's keep our HTML file test.htm and image file test.png in the same directory:

```html
<!DOCTYPE html>
<html>
<head>
<title>Using Image in Webpage</title>
</head>
<body>
<p>Simple Image Insert</p>
<img src="test.png" alt="Test Image" />
</body>
</html>
```

This will produce the following result:

Simple Image Insert

You can use PNG, JPEG or GIF image file based on your comfort but make sure you specify correct image file name in `src` attribute. Image name is always case sensitive.
The **alt** attribute is a mandatory attribute which specifies an alternate text for an image, if the image cannot be displayed.

### Set Image Location

Usually we keep all the images in a separate directory. So let's keep HTML file **test.htm** in our home directory and create a subdirectory **images** inside the home directory where we will keep our image **test.png**.

### Example

Assuming our image location is "image/test.png", try the following example:

```html
<!DOCTYPE html>
<html>
<head>
    <title>Using Image in Webpage</title>
</head>
<body>
    <p>Simple Image Insert</p>
    <img src="images/test.png" alt="Test Image"/>
</body>
</html>
```

This will produce the following result:

![Simple Image Insert](image/test.png)

### Set Image Width/Height

You can set image width and height based on your requirement using **width** and **height** attributes. You can specify width and height of the image in terms of either pixels or percentage of its actual size.

### Example

```html
<!DOCTYPE html>
<html>
<head>
    <title>Set Image Width and Height</title>
</head>
<body>
    <title>Set Image Width and Height</title>
</body>
</html>
```
Setting image width and height

Set Image Border

By default, image will have a border around it, you can specify border thickness in terms of pixels using border attribute. A thickness of 0 means, no border around the picture.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>Set Image Border</title>
</head>
<body>
<p>Setting image Border</p>
<img src="test.png" alt="Test Image" border="3"/>
</body>
</html>
```

This will produce the following result:

Setting image Border
Set Image Alignment

By default, image will align at the left side of the page, but you can use `align` attribute to set it in the center or right.

Example

```
<!DOCTYPE html>
<html>
<head>
  <title>Set Image Alignment</title>
</head>
<body>
  <p>Setting image Alignment</p>
  <img src="test.png" alt="Test Image" border="3" align="right"/>
</body>
</html>
```

This will produce the following result:

```
Setting image Alignment
```

Free Web Graphics

For Free Web Graphics including patterns you can look into Free Web Graphics
The HTML tables allow web authors to arrange data like text, images, links, other tables, etc. into rows and columns of cells.

The HTML tables are created using the `<table>` tag in which the `<tr>` tag is used to create table rows and `<td>` tag is used to create data cells.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Tables</title>
</head>
<body>
<table border="1">
<tr>
<td>Row 1, Column 1</td>
<td>Row 1, Column 2</td>
</tr>
<tr>
<td>Row 2, Column 1</td>
<td>Row 2, Column 2</td>
</tr>
</table>
</body>
</html>
```

This will produce the following result:

<table>
<thead>
<tr>
<th>Row 1, Column 1</th>
<th>Row 1, Column 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 2, Column 1</td>
<td>Row 2, Column 2</td>
</tr>
</tbody>
</table>

Here, the `border` is an attribute of `<table>` tag and it is used to put a border across all the cells. If you do not need a border, then you can use `border="0"`. 
Table Heading

Table heading can be defined using `<th>` tag. This tag will be put to replace `<td>` tag, which is used to represent actual data cell. Normally you will put your top row as table heading as shown below, otherwise you can use `<th>` element in any row.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Table Header</title>
</head>
<body>
<table border="1">
<tr>
<th>Name</th>
<th>Salary</th>
</tr>
<tr>
<td>Ramesh Raman</td>
<td>5000</td>
</tr>
<tr>
<td>Shabbir Hussein</td>
<td>7000</td>
</tr>
</table>
</body>
</html>
```

This will produce the following result:

<table>
<thead>
<tr>
<th>Name</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramesh Raman</td>
<td>5000</td>
</tr>
<tr>
<td>Shabbir Hussein</td>
<td>7000</td>
</tr>
</tbody>
</table>
Cellpadding and Cellspacing Attributes

There are two attributes called `cellpadding` and `cellspacing` which you will use to adjust the white space in your table cells. The cellspacing attribute defines the width of the border, while cellpadding represents the distance between cell borders and the content within a cell.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Table Cellpadding</title>
</head>
<body>
<table border="1" cellpadding="5" cellspacing="5">
<tr>
<th>Name</th>
<th>Salary</th>
</tr>
<tr>
<td>Ramesh Raman</td>
<td>5000</td>
</tr>
<tr>
<td>Shabbir Hussein</td>
<td>7000</td>
</tr>
</table>
</body>
</html>
```

This will produce the following result:

<table>
<thead>
<tr>
<th>Name</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramesh Raman</td>
<td>5000</td>
</tr>
<tr>
<td>Shabbir Hussein</td>
<td>7000</td>
</tr>
</tbody>
</table>
Colspan and Rowspan Attributes

You will use **colspan** attribute if you want to merge two or more columns into a single column. Similar way you will use **rowspan** if you want to merge two or more rows.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Table Colspan/Rowspan</title>
</head>
<body>
<table border="1">
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
</tr>
<tr><td rowspan="2">Row 1 Cell 1</td><td>Row 1 Cell 2</td><td>Row 1 Cell 3</td></tr>
<tr><td>Row 2 Cell 2</td><td>Row 2 Cell 3</td></tr>
<tr><td colspan="3">Row 3 Cell 1</td></tr>
</table>
</body>
</html>
```

This will produce the following result:

```
<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1 Cell 1</td>
<td>Row 1 Cell 2</td>
<td>Row 1 Cell 3</td>
</tr>
<tr>
<td>Row 2 Cell 2</td>
<td>Row 2 Cell 3</td>
<td></td>
</tr>
<tr>
<td>Row 3 Cell 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

Tables Backgrounds

You can set table background using one of the following two ways:

- **bgcolor** attribute - You can set background color for whole table or just for one cell.
• **background** attribute - You can set background image for whole table or just for one cell.

You can also set border color also using **bordercolor** attribute.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Table Background</title>
</head>
<body>
<table border="1" bordercolor="green" bgcolor="yellow">
  <tr>
    <th>Column 1</th>
    <th>Column 2</th>
    <th>Column 3</th>
  </tr>
  <tr><td rowspan="2">Row 1 Cell 1</td><td>Row 1 Cell 2</td><td>Row 1 Cell 3</td></tr>
  <tr><td>Row 2 Cell 2</td><td>Row 2 Cell 3</td></tr>
  <tr><td colspan="3">Row 3 Cell 1</td></tr>
</table>
</body>
</html>
```

This will produce the following result:

```
Column 1 | Column 2 | Column 3
---------|---------|---------
Row 1 Cell 1 | Row 1 Cell 2 | Row 1 Cell 3
              | Row 2 Cell 2 | Row 2 Cell 3
Row 3 Cell 1
```

Here is an example of using **background** attribute. Here we will use an image available in /images directory.

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Table Background</title>
</head>
<body>
</body>
</html>
```
This will produce the following result. Here background image did not apply to table's header.

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1 Cell 1</td>
<td>Row 1 Cell 2</td>
<td>Row 1 Cell 3</td>
</tr>
<tr>
<td>Row 2 Cell 2</td>
<td>Row 2 Cell 3</td>
<td></td>
</tr>
<tr>
<td>Row 3 Cell 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table Height and Width**

You can set a table width and height using **width** and **height** attributes. You can specify table width or height in terms of pixels or in terms of percentage of available screen area.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Table Width/Height</title>
</head>
<body>
<table border="1" width="400" height="150">
<tr>...
```

---

**tutorialspoint**

**SIMPLY EASY LEARNING**
This will produce the following result:

<table>
<thead>
<tr>
<th>Row 1, Column 1</th>
<th>Row 1, Column 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 2, Column 1</td>
<td>Row 2, Column 2</td>
</tr>
</tbody>
</table>

**Table Caption**

The *caption* tag will serve as a title or explanation for the table and it shows up at the top of the table. This tag is deprecated in newer version of HTML/XHTML.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Table Caption</title>
</head>
<body>
<table border="1" width="100%">
  <caption>This is the caption</caption>
  <tr>
    <td>row 1, column 1</td><td>row 1, column 2</td>
  </tr>
  <tr>
    <td>row 2, column 1</td><td>row 2, column 2</td>
  </tr>
</table>
</body>
```
This will produce the following result:

<table>
<thead>
<tr>
<th>This is the caption</th>
</tr>
</thead>
<tbody>
<tr>
<td>row 1, column 1</td>
</tr>
<tr>
<td>row 2, column 1</td>
</tr>
<tr>
<td>row 1, column 2</td>
</tr>
<tr>
<td>row 2, column 2</td>
</tr>
</tbody>
</table>

### Table Header, Body, and Footer

Tables can be divided into three portions: a header, a body, and a foot. The head and foot are rather similar to headers and footers in a word-processed document that remain the same for every page, while the body is the main content holder of the table.

The three elements for separating the head, body, and foot of a table are:

- `<thead>` - to create a separate table header.
- `<tbody>` - to indicate the main body of the table.
- `<tfoot>` - to create a separate table footer.

A table may contain several `<tbody>` elements to indicate different pages or groups of data. But it is notable that `<thead>` and `<tfoot>` tags should appear before `<tbody>`.

### Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Table</title>
</head>
<body>
<table border="1" width="100%">
<thead>
<tr>
<td colspan="4">This is the head of the table</td>
</tr>
</thead>
<tbody>
<tr>
<td colspan="4">This is the foot of the table</td>
</tr>
</tbody>
</table>
</body>
</html>
```
This will produce the following result:

<table>
<thead>
<tr>
<th>This is the head of the table</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is the foot of the table</td>
</tr>
<tr>
<td>Cell 1</td>
</tr>
</tbody>
</table>

**Nested Tables**

You can use one table inside another table. Not only tables you can use almost all the tags inside table data tag `<td>`.

**Example**

Following is the example of using another table and other tags inside a table cell.

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Table</title>
</head>
<body>
<table border="1" width="100%">
<tr>
<td>
<table border="1" width="100%">
<tr>
<th>Name</th>
<th>Salary</th>
</tr>
</table>
</td>
</tr>
</table>
</body>
</html>
```
This will produce the following result:

<table>
<thead>
<tr>
<th>Name</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramesh Raman</td>
<td>5000</td>
</tr>
<tr>
<td>Shabbir Hussein</td>
<td>7000</td>
</tr>
</tbody>
</table>
HTML offers web authors three ways for specifying lists of information. All lists must contain one or more list elements. Lists may contain:

- `<ul>` - An unordered list. This will list items using plain bullets.
- `<ol>` - An ordered list. This will use different schemes of numbers to list your items.
- `<dl>` - A definition list. This arranges your items in the same way as they are arranged in a dictionary.

## HTML Unordered Lists

An unordered list is a collection of related items that have no special order or sequence. This list is created by using HTML `<ul>` tag. Each item in the list is marked with a bullet.

### Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Unordered List</title>
</head>
<body>
<ul>
<li>Beetroot</li>
<li>Ginger</li>
<li>Potato</li>
<li>Radish</li>
</ul>
</body>
</html>
```

This will produce the following result:

- Beetroot
- Ginger
- Potato
- Radish
The type Attribute

You can use `type` attribute for `<ul>` tag to specify the type of bullet you like. By default, it is a disc. Following are the possible options:

```html
<ul type="square">
<ul type="disc">
<ul type="circle">
```

Example

Following is an example where we used `<ul type="square">

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Unordered List</title>
</head>
<body>
<ul type="square">
<li>Beetroot</li>
<li>Ginger</li>
<li>Potato</li>
<li>Radish</li>
</ul>
</body>
</html>
```

This will produce the following result:

- Beetroot
- Ginger
- Potato
- Radish

Example

Following is an example where we used `<ul type="disc">

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Unordered List</title>
</head>
```
<body>
  <ul type="disc">
    <li>Beetroot</li>
    <li>Ginger</li>
    <li>Potato</li>
    <li>Radish</li>
  </ul>
</body>

This will produce the following result:

- Beetroot
- Ginger
- Potato
- Radish

Example

Following is an example where we used <ul type="circle">:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Unordered List</title>
</head>
<body>
  <ul type="circle">
    <li>Beetroot</li>
    <li>Ginger</li>
    <li>Potato</li>
    <li>Radish</li>
  </ul>
</body>
</html>
```

This will produce the following result:

- Beetroot
- Ginger
- Potato
- Radish
HTML Ordered Lists

If you are required to put your items in a numbered list instead of bulleted, then HTML ordered list will be used. This list is created by using `<ol>` tag. The numbering starts at one and is incremented by one for each successive ordered list element tagged with `<li>`.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Ordered List</title>
</head>
<body>
<ol>
<li>Beetroot</li>
<li>Ginger</li>
<li>Potato</li>
<li>Radish</li>
</ol>
</body>
</html>
```

This will produce the following result:

1. Beetroot
2. Ginger
3. Potato
4. Radish

The type Attribute

You can use `type` attribute for `<ol>` tag to specify the type of numbering you like. By default, it is a number. Following are the possible options:

```html
<ol type="1"> - Default-Case Numerals.
<ol type="I"> - Upper-Case Numerals.
<ol type="i"> - Lower-Case Numerals.
<ol type="a"> - Lower-Case Letters.
<ol type="A"> - Upper-Case Letters.
```
**Example**
Following is an example where we used `<ol type="1">`

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Ordered List</title>
</head>
<body>

<ol type="1">
  <li>Beetroot</li>
  <li>Ginger</li>
  <li>Potato</li>
  <li>Radish</li>
</ol>

</body>
</html>
```

This will produce the following result:

1. Beetroot
2. Ginger
3. Potato
4. Radish

**Example**
Following is an example where we used `<ol type="I">`

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Ordered List</title>
</head>
<body>

<ol type="I">
  <li>Beetroot</li>
  <li>Ginger</li>
  <li>Potato</li>
  <li>Radish</li>
</ol>

</body>
</html>
```
This will produce the following result:

I. Beetroot  
II. Ginger   
III. Potato  
IV. Radish

Example

Following is an example where we used <ol type="i">

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Ordered List</title>
</head>
<body>
<ol type="i">
<li>Beetroot</li>
<li>Ginger</li>
<li>Potato</li>
<li>Radish</li>
</ol>
</body>
</html>
```

This will produce the following result:

i. Beetroot  
ii. Ginger   
iii. Potato  
iv. Radish

Example

Following is an example where we used <ol type="A">

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Ordered List</title>
</head>
<body>
</body>
</html>
```
This will produce the following result:

A. Beetroot  
B. Ginger  
C. Potato  
D. Radish

**Example**

Following is an example where we used `<ol type="a">`

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Ordered List</title>
</head>
<body>

<ol type="a">
  <li>Beetroot</li>
  <li>Ginger</li>
  <li>Potato</li>
  <li>Radish</li>
</ol>

</body>
</html>
```

This will produce the following result:

a. Beetroot  
b. Ginger  
c. Potato  
d. Radish
The start Attribute

You can use the start attribute for the <ol> tag to specify the starting point of numbering you need. Following are the possible options:

<table>
<thead>
<tr>
<th>Example</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;ol type=&quot;1&quot; start=&quot;4&quot;&gt;</code></td>
<td>Numerals starts with 4.</td>
</tr>
<tr>
<td><code>&lt;ol type=&quot;I&quot; start=&quot;4&quot;&gt;</code></td>
<td>Numerals starts with IV.</td>
</tr>
<tr>
<td><code>&lt;ol type=&quot;i&quot; start=&quot;4&quot;&gt;</code></td>
<td>Numerals starts with iv.</td>
</tr>
<tr>
<td><code>&lt;ol type=&quot;a&quot; start=&quot;4&quot;&gt;</code></td>
<td>Letters starts with d.</td>
</tr>
<tr>
<td><code>&lt;ol type=&quot;A&quot; start=&quot;4&quot;&gt;</code></td>
<td>Letters starts with D.</td>
</tr>
</tbody>
</table>

Example

Following is an example where we used `<ol type="i" start="4"` >

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Ordered List</title>
</head>
<body>
  <ol type="i" start="4">
    <li>Beetroot</li>
    <li>Ginger</li>
    <li>Potato</li>
    <li>Radish</li>
  </ol>
</body>
</html>
```

This will produce the following result:

iv. Beetroot  
v. Ginger  
vi. Potato  
vii. Radish

HTML Definition Lists

HTML and XHTML support a list style which is called definition lists where entries are listed like in a dictionary or encyclopedia. The definition list is the ideal way to present a glossary, list of terms, or other name/value list.

Definition List makes use of following three tags:

- `<dl>` - Defines the start of the list
•  `<dt>` - A term
•  `<dd>` - Term definition
•  `</dl>` - Defines the end of the list

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Definition List</title>
</head>
<body>
<dl>
  <dt><b>HTML</b></dt>
  <dd>This stands for Hyper Text Markup Language</dd>
  <dt><b>HTTP</b></dt>
  <dd>This stands for Hyper Text Transfer Protocol</dd>
</dl>
</body>
</html>
```

This will produce the following result:

**HTML**

This stands for Hyper Text Markup Language

**HTTP**

This stands for Hyper Text Transfer Protocol
A webpage can contain various links that take you directly to other pages and even specific parts of a given page. These links are known as hyperlinks.

Hyperlinks allow visitors to navigate between Web sites by clicking on words, phrases, and images. Thus you can create hyperlinks using text or images available on a webpage.

**Note:** I recommend you to go through a short tutorial on [Understanding URL](#).

### Linking Documents

A link is specified using HTML tag `<a>`. This tag is called anchor tag and anything between the opening `<a>` tag and the closing `</a>` tag becomes part of the link and a user can click that part to reach to the linked document. Following is the simple syntax to use `<a>` tag.

```
<a href="Document URL" ... attributes-list>Link Text</a>
```

### Example

Let's try following example which links http://www.tutorialspoint.com at your page:

```html
<!DOCTYPE html>
<html>
<head>
<title>Hyperlink Example</title>
</head>
<body>
<p>Click following link</p>
<a href="http://www.tutorialspoint.com" target="_self">Tutorials Point</a>
</body>
</html>
```

This will produce the following result, where you can click on the link generated to reach to the home page of Tutorials Point (in this example).

Click following link

**Tutorials Point**

### The target Attribute

We have used `target` attribute in our previous example. This attribute is used to specify the location where linked document is opened. Following are the possible options:
### Option Description

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>_blank</td>
<td>Opens the linked document in a new window or tab.</td>
</tr>
<tr>
<td>_self</td>
<td>Opens the linked document in the same frame.</td>
</tr>
<tr>
<td>_parent</td>
<td>Opens the linked document in the parent frame.</td>
</tr>
<tr>
<td>_top</td>
<td>Opens the linked document in the full body of the window.</td>
</tr>
<tr>
<td>targetframe</td>
<td>Opens the linked document in a named targetframe.</td>
</tr>
</tbody>
</table>

### Example

Try following example to understand basic difference in few options given for target attribute.

```html
<!DOCTYPE html>
<html>
<head>
<title>Hyperlink Example</title>
<base href="http://www.tutorialspoint.com/">
</head>
<body>
<p>Click any of the following links</p>
<a href="/html/index.htm" target="_blank">Opens in New</a> |
<a href="/html/index.htm" target="_self">Opens in Self</a> |
<a href="/html/index.htm" target="_parent">Opens in Parent</a> |
<a href="/html/index.htm" target="_top">Opens in Body</a>
</body>
</html>
```

This will produce the following result, where you can click on different links to understand the difference between various options given for target attribute.

Click any of the following links


### Use of Base Path

When you link HTML documents related to the same website, it is not required to give a complete URL for every link. You can get rid of it if you use `<base>` tag in your HTML
document header. This tag is used to give a base path for all the links. So your browser will concatenate given relative path to this base path and will make a complete URL.

Example

Following example makes use of <base> tag to specify base URL and later we can use relative path to all the links instead of giving complete URL for every link.

```html
<!DOCTYPE html>
<html>
<head>
<title>Hyperlink Example</title>
<base href="http://www.tutorialspoint.com/">
</head>
<body>
<p>Click following link</p>
<a href="/html/index.htm" target="_blank">HTML Tutorial</a>
</body>
</html>
```

This will produce the following result, where you can click on the link generated **HTML Tutorial** to reach to the HTML tutorial.

Now given URL `<a href="/html/index.htm"` is being considered as `<ahref="http://www.tutorialspoint.com/html/index.htm"` Click following link

**HTML Tutorial**

### Linking to a Page Section

You can create a link to a particular section of a given webpage by using `name` attribute. This is a two-step process.

First create a link to the place where you want to reach with-in a webpage and name it using `<a...>` tag as follows:

```html
<h1>HTML Text Links  <a name="top"></a></h1>
```

Second step is to create a hyperlink to link the document and place where you want to reach:

```html
<a href="/html/html_text_links.htm#top">Go to the Top</a>
```

This will produce following link, where you can click on the link generated **Go to the Top** to reach to the top of the HTML Text Link tutorial.
Setting Link Colors

You can set colors of your links, active links and visited links using link, alink and vlink attributes of <body> tag.

Example

Save the following in test.htm and open it in any web browser to see how link, alink and vlink attributes work.

```html
<!DOCTYPE html>
<html>
<head>
<title>Hyperlink Example</title>
</head>
<body align="#54A250" link="#040404" vlink="#F40633">
<p>Click following link</p>
<a href="/html/index.htm" target="_blank" >HTML Tutorial</a>
</body>
</html>
```

This will produce the following result. Just check color of the link before clicking on it, next check its color when you activate it and when the link has been visited.

Click following link

HTML Tutorial

Download Links

You can create text link to make your PDF, or DOC or ZIP files downloadable. This is very simple; you just need to give complete URL of the downloadable file as follows:

```html
<!DOCTYPE html>
<html>
<head>
</head>
<body>
<a href="http://www.tutorialspoint.com/page.pdf">Download PDF File</a>
</body>
```
This will produce the following link and will be used to download a file.

Download PDF File

**File Download Dialog Box**

Sometimes it is desired that you want to give an option where a user will click a link and it will pop up a "File Download" box to the user instead of displaying actual content. This is very easy and can be achieved using an HTTP header in your HTTP response.

For example, if you want to make a **Filename** file downloadable from a given link then its syntax will be as follows.

```
#!/usr/bin/perl

# Additional HTTP Header
print "Content-Type: application/octet-stream; name="FileName"\r\n";
print "Content-Disposition: attachment; filename="FileName"\r\n";

# Open the target file and list down its content as follows
open( FILE, "<FileName" );
while(read(FILE, $buffer, 100)){
    print("$buffer");
}
```

**Note:** For more detail on PERL CGI programs, go through tutorial [PERL and CGI](https://www.tutorialspoint.com/perl_and_cgi).
We have seen how to create hypertext link using text and we also learnt how to use images in our webpages. Now, we will learn how to use images to create hyperlinks.

**Example**

It's simple to use an image as hyperlink. We just need to use an image inside hyperlink at the place of text as shown below:

```html
<!DOCTYPE html>
<html>
<head>
<title>Image Hyperlink Example</title>
</head>
<body>
<p>Click following link</p>
<a href="http://www.tutorialspoint.com" target="_self">
  <img src="/images/logo.png" alt="Tutorials Point" border="0"/>
</a>
</body>
</html>
```

This will produce the following result, where you can click on the images to reach to the home page of Tutorials Point.

Click following link

![Image](tutorialspoint.com)

This was the simplest way of creating hyperlinks using images. Next we will see how we can create Mouse-Sensitive Image Links.

**Mouse-Sensitive Images**

The HTML and XHTML standards provides a feature that lets you embed many different links inside a single image. You can create different links on the single image based on different coordinates available on the image. Once different links are attached to different coordinates, we can click different parts of the image to open target documents. Such mouse-sensitive images are known as image maps.
There are two ways to create image maps:

- **Server-side image maps** - This is enabled by the `ismap` attribute of the `<img>` tag and requires access to a server and related image-map processing applications.

- **Client-side image maps** - This is created with the `usemap` attribute of the `<img>` tag, along with corresponding `<map>` and `<area>` tags.

### Server-Side Image Maps

Here you simply put your image inside a hyper link and use `ismap` attribute which makes it special image and when the user clicks some place within the image, the browser passes the coordinates of the mouse pointer along with the URL specified in the `<a>` tag to the web server. The server uses the mouse-pointer coordinates to determine which document to deliver back to the browser.

When `ismap` is used, the `href` attribute of the containing `<a>` tag must contain the URL of a server application like a cgi or PHP script etc. to process the incoming request based on the passed coordinates.

The coordinates of the mouse position are screen pixels counted from the upper-left corner of the image, beginning with (0,0). The coordinates, preceded by a question mark, are added to the end of the URL.

For example, if a user clicks 20 pixels over and 30 pixels down from the upper-left corner of the following image:

Click following link

Which has been generated by the following code snippet:

```html
<!DOCTYPE html>
<html>
<head>
<title>ISMAP Hyperlink Example</title>
</head>
<body>
<p>Click following link</p>
<a href="/cgi-bin/ismap.cgi" target="_self">
    <img ismap src="/images/logo.png" alt="Tutorials Point" border="0"/>
</a>
</body>
</html>
```
Then the browser sends the following search parameters to the web server which can be processed by *ismap.cgi* script or *map file* and you can link whatever documents you like to these coordinates:

```
/cgi-bin/ismap.cgi?20,30
```

This way you can assign different links to different coordinates of the image and when those coordinates are clicked, you can open corresponding linked document. To learn more about *ismap* attribute, you can check [How to use Image ismap?](#).

**Note:** You will learn CGI programming when you will study Perl programming. You can write your script to process these passed coordinates using PHP or any other script as well. For now, let's concentrate on learning HTML and later you can revisit this section.

---

**Client-Side Image Maps**

Client side image maps are enabled by the `usemap` attribute of the `<img />` tag and defined by special `<map>` and `<area>` extension tags.

The image that is going to form the map is inserted into the page using the `<img />` tag as a normal image, except it carries an extra attribute called `usemap`. The value of the usemap attribute is the value which will be used in a `<map>` tag to link map and image tags. The `<map>` along with `<area>` tags define all the image coordinates and corresponding links.

The `<area>` tag inside the map tag, specifies the shape and the coordinates to define the boundaries of each clickable hotspot available on the image. Here's an example from the image map:

```html
<!DOCTYPE html>
<html>
<head>
<title>USEMAP Hyperlink Example</title>
</head>
<body>
<p>Search and click the hotspot</p>
<img src="/images/html.gif alt="HTML Map" border="0" usemap="#html" />
<!-- Create Mappings -->
<map name="html">
  <area shape="circle"
       coords="80,80,20" href="/css/index.htm" alt="CSS Link" target="_self"/>
  <area shape="rect"
       coords="5,5,40,40" href="/jquery/index.htm" alt="jQuery Link" target="_self"/>
</map>
</body>
</html>
```
Coordinate System

The actual value of coords is totally dependent on the shape in question. Here is a summary, to be followed by detailed examples:

**rect** = \( x_1 , y_1 , x_2 , y_2 \)

\( x_1 \) and \( y_1 \) are the coordinates of the upper left corner of the rectangle; \( x_2 \) and \( y_2 \) are the coordinates of the lower right corner.

**circle** = \( x_c , y_c , \text{radius} \)

\( x_c \) and \( y_c \) are the coordinates of the center of the circle, and radius is the circle's radius. A circle centered at 200,50 with a radius of 25 would have the attribute \( \text{coords}="200,50,25" \)

**poly** = \( x_1 , y_1 , x_2 , y_2 , x_3 , y_3 , \ldots x_n , y_n \)

The various x-y pairs define vertices (points) of the polygon, with a "line" being drawn from one point to the next point. A diamond-shaped polygon with its top point at 20,20 and 40 pixels across at its widest points would have the attribute \( \text{coords}="20,20,40,40,20,60,0,40" \).

All coordinates are relative to the upper-left corner of the image (0,0). Each shape has a related URL. You can use any image software to know the coordinates of different positions.
It is not difficult to put an HTML email link on your webpage but it can cause unnecessary spamming problem for your email account. There are people, who can run programs to harvest these types of emails and later use them for spamming in various ways.

You can have another option to facilitate people to send you emails. One option could be to use HTML forms to collect user data and then use PHP or CGI script to send an email.

A simple example, check our Contact Us Form. We take user feedback using this form and then we are using one CGI program which is collecting this information and sending us email to the one given email ID.

**Note:** You will learn about HTML Forms in [HTML Forms](https://www.tutorialspoint.com/html/html_forms.htm) and you will learn about CGI in our another tutorial [Perl CGI Programming](https://www.tutorialspoint.com/perl/perl.cgi_programming.htm).

### HTML Email Tag

HTML `<a>` tag provides you option to specify an email address to send an email. While using `<a>` tag as an email tag, you will use `mailto: email address` along with `href` attribute. Following is the syntax of using `mailto` instead of using http.

```html
<a href= "mailto: abc@example.com">Send Email</a>
```

This code will generate the following link which you can use to send email.

Send Email

Now, if a user clicks this link, it launches one Email Client (like Lotus Notes, Outlook Express etc. ) installed on your user's computer. There is another risk to use this option to send email because if user do not have email client installed on their computer then it would not be possible to send email.

### Default Settings

You can specify a default email subject and email body along with your email address. Following is the example to use default subject and body.

```html
<a href="mailto:abc@example.com?subject=Feedback&body=Message">Send Feedback</a>
```

This code will generate the following link which you can use to send email.

Send Feedback
HTML frames are used to divide your browser window into multiple sections where each section can load a separate HTML document. A collection of frames in the browser window is known as a frameset. The window is divided into frames in a similar way the tables are organized: into rows and columns.

Disadvantages of Frames

There are few drawbacks with using frames, so it's never recommended to use frames in your webpages:

- Some smaller devices cannot cope with frames often because their screen is not big enough to be divided up.
- Sometimes your page will be displayed differently on different computers due to different screen resolution.
- The browser's back button might not work as the user hopes.
- There are still few browsers that do not support frame technology.

Creating Frames

To use frames on a page we use <frameset> tag instead of <body> tag. The <frameset> tag defines, how to divide the window into frames. The rows attribute of <frameset> tag defines horizontal frames and cols attribute defines vertical frames. Each frame is indicated by <frame> tag and it defines which HTML document shall open into the frame.

Example

Following is the example to create three horizontal frames:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Frames</title>
</head>

<frameset rows="10%,80%,10%">
  <frame name="top" src="/html/top_frame.htm" />
  <frame name="main" src="/html/main_frame.htm" />
  <frame name="bottom" src="/html/bottom_frame.htm" />
</frameset>

<body>
```


This will produce the following result:

**Example**

Let's put the above example as follows, here we replaced rows attribute by cols and changed their width. This will create all the three frames vertically:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Frames</title>
</head>
<br/>
<frameset cols="25%,50%,25%">
  <frame name="left" src="/html/top_frame.htm" />
  <frame name="center" src="/html/main_frame.htm" />
  <frame name="right" src="/html/bottom_frame.htm" />
</frameset>
<body>
  Your browser does not support frames.
</body>
</html>
```
This will produce the following result:

![Frameset Diagram]

**The `<frameset>` Tag Attributes**

Following are important attributes of the `<frameset>` tag:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
</table>
| cols      | Specifies how many columns are contained in the frameset and the size of each column. You can specify the width of each column in one of the four ways:  
Absolute values in pixels. For example, to create three vertical frames, use `cols="100, 500,100"`.  
A percentage of the browser window. For example, to create three vertical frames, use `cols="10%, 80%,10%"`.  
Using a wildcard symbol. For example, to create three vertical frames, use `cols="10%, *,10%"`. In this case wildcard takes remainder of the window.  
As relative widths of the browser window. For example, to create three vertical frames, use `cols="3*,2*,1*"`. This is an alternative to percentages. You can use relative widths of the browser window. Here the window is divided into sixths: the first column takes up half of the window, the second takes one third, and the third takes one sixth. |
| rows      | This attribute works just like the cols attribute and takes the same values, but it is used to specify the rows in the frameset. For example, to create two horizontal frames, use `rows="10%, 90%"`. You can specify the height of each row in the same way as explained above for columns. |
| border    | This attribute specifies the width of the border of each frame in pixels. For example, `border="5"`. A value of zero means no border. |
| frameborder | This attribute specifies whether a three-dimensional border should be displayed between frames. This attribute takes value either 1 (yes) or 0 (no). For example frameborder="0" specifies no border. |
framespacing
This attribute specifies the amount of space between frames in a frameset. This can take any integer value. For example framespacing="10" means there should be 10 pixels spacing between each frames.

The <frame> Tag Attributes
Following are the important attributes of <frame> tag:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>src</td>
<td>This attribute is used to give the file name that should be loaded in the frame. Its value can be any URL. For example, src=&quot;/html/top_frame.htm&quot; will load an HTML file available in html directory.</td>
</tr>
<tr>
<td>name</td>
<td>This attribute allows you to give a name to a frame. It is used to indicate which frame a document should be loaded into. This is especially important when you want to create links in one frame that load pages into an another frame, in which case the second frame needs a name to identify itself as the target of the link.</td>
</tr>
<tr>
<td>frameborder</td>
<td>This attribute specifies whether or not the borders of that frame are shown; it overrides the value given in the frameborder attribute on the &lt;frameset&gt; tag if one is given, and this can take values either 1 (yes) or 0 (no).</td>
</tr>
<tr>
<td>marginwidth</td>
<td>This attribute allows you to specify the width of the space between the left and right of the frame's borders and the frame's content. The value is given in pixels. For example marginwidth=&quot;10&quot;.</td>
</tr>
<tr>
<td>marginheight</td>
<td>This attribute allows you to specify the height of the space between the top and bottom of the frame's borders and its contents. The value is given in pixels. For example marginheight=&quot;10&quot;.</td>
</tr>
<tr>
<td>noresize</td>
<td>By default, you can resize any frame by clicking and dragging on the borders of a frame. The noresize attribute prevents a user from being able to resize the frame. For example noresize=&quot;noresize&quot;.</td>
</tr>
<tr>
<td>scrolling</td>
<td>This attribute controls the appearance of the scrollbars that appear on the frame. This takes values either &quot;yes&quot;, &quot;no&quot; or &quot;auto&quot;. For example scrolling=&quot;no&quot; means it should not have scroll bars.</td>
</tr>
</tbody>
</table>
longdesc This attribute allows you to provide a link to another page containing a long description of the contents of the frame. For example longdesc="framedescription.htm"

**Browser Support for Frames**

If a user is using any old browser or any browser, which does not support frames then `<noframes>` element should be displayed to the user.

So you must place a `<body>` element inside the `<noframes>` element because the `<frameset>` element is supposed to replace the `<body>` element, but if a browser does not understand `<frameset>` element then it should understand what is inside the `<body>` element which is contained in a `<noframes>` element.

You can put some nice message for your user having old browsers. For example, *Sorry!! your browser does not support frames.* as shown in the above example.

**Frame’s name and target attributes**

One of the most popular uses of frames is to place navigation bars in one frame and then load main pages into a separate frame.

Let’s see following example where a test.htm file has following code:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Target Frames</title>
</head>

<frameset cols="200, *">
    <frame src="/html/menu.htm" name="menu_page" />
    <frame src="/html/main.htm" name="main_page" />
    <noframes>
        <body>
            Your browser does not support frames.
        </body>
    </noframes>
</frameset>
</html>
```

Here, we have created two columns to fill with two frames. The first frame is 200 pixels wide and will contain the navigation menu bar implemented by *menu.htm* file. The second column fills in remaining space and will contain the main part of the page and it is implemented by *main.htm* file. For all the three links available in menu bar, we have
mentioned target frame as **main_page**, so whenever you click any of the links in menu bar, available link will open in main page.

Following is the content of menu.htm file:

```html
<!DOCTYPE html>
<html>
<body bgcolor="#4a7d49">
<a href="http://www.google.com" target="main_page">Google</a>
<br />
<a href="http://www.microsoft.com" target="main_page">Microsoft</a>
<br />
<a href="http://news.bbc.co.uk" target="main_page">BBC News</a>
</body>
</html>
```

Following is the content of main.htm file:

```html
<!DOCTYPE html>
<html>
<body bgcolor="#b5dcb3">
<h3>This is main page and content from any link will be displayed here.</h3>
<p>So now click any link and see the result.</p>
</body>
</html>
```

When we load test.htm file, it produces following result:

![Google Microsoft BBC News](image)

This is main page and content from any link will be displayed here.

So now click any link and see the result.

Now you can try to click links available in the left panel and see the result. The `target` attribute can also take one of the following values:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>_self</td>
<td>Loads the page into the current frame.</td>
</tr>
<tr>
<td>_blank</td>
<td>Loads a page into a new browser window. Opening a new window.</td>
</tr>
<tr>
<td>targetframe</td>
<td>Loads the page into a named targetframe.</td>
</tr>
<tr>
<td>_parent</td>
<td>Loads the page into the parent window, which in the case of a single frameset is the main browser window.</td>
</tr>
<tr>
<td>_top</td>
<td>Loads the page into the browser window, replacing any current frames.</td>
</tr>
</tbody>
</table>
You can define an inline frame with HTML tag `<iframe>`. The `<iframe>` tag is not somehow related to `<frameset>` tag, instead, it can appear anywhere in your document. The `<iframe>` tag defines a rectangular region within the document in which the browser can display a separate document, including scrollbars and borders.

The `src` attribute is used to specify the URL of the document that occupies the inline frame.

**Example**

Following is the example to show how to use the `<iframe>`:

```html
<!DOCTYPE html>
<html>
<head>
    <title>HTML Iframes</title>
</head>
<body>
    <p>Document content goes here...</p>
    <iframe src="/html/menu.htm" width="555" height="200">
        Sorry your browser does not support inline frames.
    </iframe>
    <p>Document content also go here...</p>
</body>
</html>
```

This will produce the following result:

```
Document content goes here...

Google
Microsoft
BBC News

Document content can also go here...
```
The `<iframe>` Tag Attributes

Most of the attributes of the `<iframe>` tag, including `name`, `class`, `frameborder`, `id`, `longdesc`, `marginheight`, `marginwidth`, `name`, `scrolling`, `style`, and `title` behave exactly like the corresponding attributes for the `<frame>` tag.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>src</td>
<td>This attribute is used to give the file name that should be loaded in the frame. Its value can be any URL. For example, src=&quot;/html/top_frame.htm&quot; will load an HTML file available in html directory.</td>
</tr>
<tr>
<td>name</td>
<td>This attribute allows you to give a name to a frame. It is used to indicate which frame a document should be loaded into. This is especially important when you want to create links in one frame that load pages into another frame, in which case the second frame needs a name to identify itself as the target of the link.</td>
</tr>
<tr>
<td>frameborder</td>
<td>This attribute specifies whether or not the borders of that frame are shown; it overrides the value given in the frameborder attribute on the <code>&lt;frameset&gt;</code> tag if one is given, and this can take values either 1 (yes) or 0 (no).</td>
</tr>
<tr>
<td>marginwidth</td>
<td>This attribute allows you to specify the width of the space between the left and right of the frame's borders and the frame's content. The value is given in pixels. For example marginwidth=&quot;10&quot;.</td>
</tr>
<tr>
<td>marginheight</td>
<td>This attribute allows you to specify the height of the space between the top and bottom of the frame's borders and its contents. The value is given in pixels. For example marginheight=&quot;10&quot;.</td>
</tr>
<tr>
<td>noresize</td>
<td>By default, you can resize any frame by clicking and dragging on the borders of a frame. The noresize attribute prevents a user from being able to resize the frame. For example noresize=&quot;noresize&quot;.</td>
</tr>
<tr>
<td>scrolling</td>
<td>This attribute controls the appearance of the scrollbars that appear on the frame. This takes values either &quot;yes&quot;, &quot;no&quot; or &quot;auto&quot;. For example scrolling=&quot;no&quot; means it should not have scroll bars.</td>
</tr>
<tr>
<td>longdesc</td>
<td>This attribute allows you to provide a link to another page containing a long description of the contents of the frame. For example longdesc=&quot;framedescription.htm&quot;</td>
</tr>
</tbody>
</table>
All the HTML elements can be categorized into two categories (a) Block Level Elements (b) Inline Elements.

**Block Elements**

Block elements appear on the screen as if they have a line break before and after them. For example, the `<p>`, `<h1>`, `<h2>`, `<h3>`, `<h4>`, `<h5>`, `<h6>`, `<ul>`, `<ol>`, `<dl>`, `<pre>`, `<hr />`, `<blockquote>`, and `<address>` elements are all block level elements. They all start on their own new line, and anything that follows them appears on its own new line.

**Inline Elements**

Inline elements, on the other hand, can appear within sentences and do not have to appear on a new line of their own. The `<b>`, `<i>`, `<u>`, `<em>`, `<strong>`, `<sup>`, `<sub>`, `<big>`, `<small>`, `<del>`, `<ins>`, `<code>`, `<cite>`, `<dfn>`, `<kbd>`, and `<var>` elements are all inline elements.

**Grouping HTML Elements**

There are two important tags which we use very frequently to group various other HTML tags (i) `<div>` tag and (ii) `<span>` tag

**The `<div>` tag**

This is the very important block level tag which plays a big role in grouping various other HTML tags and applying CSS on group of elements. Even now `<div>` tag can be used to create webpage layout where we define different parts (Left, Right, Top etc.) of the page using `<div>` tag. This tag does not provide any visual change on the block but this has more meaning when it is used with CSS.

**Example**

Following is a simple example of `<div>` tag. We will learn Cascading Style Sheet (CSS) in a separate chapter but we used it here to show the usage of `<div>` tag:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML div Tag</title>
</head>
<body>
</body>
```
This will produce the following result:

**THIS IS FIRST GROUP**

Following is a list of vegetables

- Beetroot
- Ginger
- Potato
- Radish

**THIS IS SECOND GROUP**

Following is a list of fruits
The <span> tag

The HTML <span> is an inline element and it can be used to group inline-elements in an HTML document. This tag also does not provide any visual change on the block but has more meaning when it is used with CSS.

The difference between the <span> tag and the <div> tag is that the <span> tag is used with inline elements whereas the <div> tag is used with block-level elements.

Example

Following is a simple example of <span> tag. We will learn Cascading Style Sheet (CSS) in a separate chapter but we used it here to show the usage of <span> tag:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML span Tag</title>
</head>
<body>

<p>This is <span style="color:red">red</span> and this is <span style="color:green">green</span></p>

</body>
</html>
```

This will produce the following result:

This is red, and this is green
By default, your webpage background is white in color. You may not like it, but no worries. HTML provides you following two good ways to decorate your webpage background.

- Html Background with Colors
- Html Background with Images

Now let’s see both the approaches one by one using appropriate examples.

**Html Background with Colors**

The bgcolor attribute is used to control the background of an HTML element, specifically page body and table backgrounds. Following is the syntax to use bgcolor attribute with any HTML tag.

```html
<tagname bgcolor="color_value"...>
```

This color_value can be given in any of the following formats:

```html
<!-- Format 1 - Use color name -->
table bgcolor="lime" >
</tagname bgcolor="color_value"...>

<!-- Format 2 - Use hex value -->
table bgcolor="#f1f1f1" >

<!-- Format 3 - Use color value in RGB terms -->
table bgcolor="rgb(0,0,120)" >
```

**Example**

Here are the examples to set background of an HTML tag:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Background Colors</title>
</head>
<body>

<!-- Format 1 - Use color name -->
table bgcolor="yellow" width="100%" >
```
This background is yellow
</td></tr>
</table>

<!-- Format 2 - Use hex value -->
<table bgcolor="#6666FF" width="100%">
<tr><td>
This background is sky blue
</td></tr>
</table>

<!-- Format 3 - Use color value in RGB terms -->
<table bgcolor="rgb(255,0,255)" width="100%">
<tr><td>
This background is green
</td></tr>
</table>

</body>
</html>

This will produce the following result:

This background is yellow
This background is sky blue
This background is green

Html Background with Images

The **background** attribute can also be used to control the background of an HTML element, specifically page body and table backgrounds. You can specify an image to set background of your HTML page or table. Following is the syntax to use background attribute with any HTML tag.

**Note:** The `background` attribute is deprecated and it is recommended to use Style Sheet for background setting.

```html
<tagname background="Image URL"/>
```

The most frequently used image formats are JPEG, GIF and PNG images.
Example

Here are the examples to set background images of a table.

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Background Images</title>
</head>
<body>

<!-- Set table background -->
<table background="/images/html.gif" width="100%" height="100">
<tr><td>
This background is filled up with HTML image.
</td></tr>
</table>

</body>
</html>
```

This will produce the following result:

This background is filled up with HTML image.

Pattemed & Transparent Backgrounds

You might have seen many pattern or transparent backgrounds on various websites. This simply can be achieved by using patterned image or transparent image in the background.

It is suggested that while creating patterns or transparent GIF or PNG images, use the smallest dimensions possible even as small as 1x1 to avoid slow loading.
Example
Here are the examples to set background pattern of a table:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Background Images</title>
</head>
<body>

<!-- Set a table background using pattern -->
<table background="/images/pattern1.gif" width="100%" height="100">
<tr><td>
This background is filled up with a pattern image.
</td></tr>
</table>

<!-- Another example on table background using pattern -->
<table background="/images/pattern2.gif" width="100%" height="100">
<tr><td>
This background is filled up with a pattern image.
</td></tr>
</table>

</body>
</html>
```

This will produce the following result:

This background is filled up with a pattern image.

This background is filled up with a pattern image.
Colors are very important to give a good look and feel to your website. You can specify colors on page level using <body> tag or you can set colors for individual tags using bgcolor attribute.

The <body> tag has following attributes which can be used to set different colors:

- **bgcolor** - sets a color for the background of the page.
- **text** - sets a color for the body text.
- **alink** - sets a color for active links or selected links.
- **link** - sets a color for linked text.
- **vlink** - sets a color for visited links - that is, for linked text that you have already clicked on.

### HTML Color Coding Methods

There are following three different methods to set colors in your web page:

- **Color names** - You can specify color names directly like green, blue or red.
- **Hex codes** - A six-digit code representing the amount of red, green, and blue that makes up the color.
- **Color decimal or percentage values** - This value is specified using the rgb() property.

Now we will see these coloring schemes one by one.

### HTML Colors - Color Names

You can specify direct a color name to set text or background color. W3C has listed 16 basic color names that will validate with an HTML validator but there are over 200 different color names supported by major browsers.

**Note:** Check a complete list of [HTML Color Name](#).
### W3C Standard 16 Colors

Here is the list of W3C Standard 16 Colors names and it is recommended to use them.

<table>
<thead>
<tr>
<th>Color</th>
<th>Color</th>
<th>Color</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>Gray</td>
<td>Silver</td>
<td>White</td>
</tr>
<tr>
<td>Yellow</td>
<td>Lime</td>
<td>Aqua</td>
<td>Fuchsia</td>
</tr>
<tr>
<td>Red</td>
<td>Green</td>
<td>Blue</td>
<td>Purple</td>
</tr>
<tr>
<td>Maroon</td>
<td>Olive</td>
<td>Navy</td>
<td>Teal</td>
</tr>
</tbody>
</table>

### Example

Here are the examples to set background of an HTML tag by color name:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Colors by Name</title>
</head>
<body text="blue" bgcolor="green">
<p>Use different color names for body and table and see the result.</p>
<table bgcolor="black">
  <tr>
    <td>
      <font color="white">This text will appear white on black background.</font>
    </td>
  </tr>
</table>
</body>
</html>
```

### HTML Colors - Hex Codes

A hexadecimal is a 6 digit representation of a color. The first two digits (RR) represent a red value, the next two are a green value (GG), and the last are the blue value (BB).

A hexadecimal value can be taken from any graphics software like Adobe Photoshop, Paintshop Pro or MS Paint.
Each hexadecimal code will be preceded by a pound or hash sign #. Following is a list of few colors using hexadecimal notation.

<table>
<thead>
<tr>
<th>Color</th>
<th>Color HEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>#000000</td>
<td>#FF0000</td>
</tr>
<tr>
<td>#00FF00</td>
<td>#0000FF</td>
</tr>
<tr>
<td>#FFFF00</td>
<td>#00FFFF</td>
</tr>
<tr>
<td>#FF00FF</td>
<td>#C0C0C0</td>
</tr>
<tr>
<td>#FFFFFF</td>
<td>#FFFFFF</td>
</tr>
</tbody>
</table>

**Example**

Here are the examples to set background of an HTML tag by color code in hexadecimal:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Colors by Hex</title>
</head>
<body text="#0000FF" bgcolor="#00FF00">
<p>Use different color hexa for for body and table and see the result.</p>
<table bgcolor="#000000">
<tr><td><font color="#FFFFFF">This text will appear white on black background.</font></td></tr>
</table>
</body>
</html>
```
### HTML Colors - RGB Values

This color value is specified using the `rgb( )` property. This property takes three values, one each for red, green, and blue. The value can be an integer between 0 and 255 or a percentage.

**Note:** All the browsers does not support rgb() property of color so it is recommended not to use it.

Following is a list to show few colors using RGB values.

<table>
<thead>
<tr>
<th>Color</th>
<th>Color RGB</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="black.png" alt="Black" /></td>
<td>rgb(0,0,0)</td>
</tr>
<tr>
<td><img src="red.png" alt="Red" /></td>
<td>rgb(255,0,0)</td>
</tr>
<tr>
<td><img src="green.png" alt="Green" /></td>
<td>rgb(0,255,0)</td>
</tr>
<tr>
<td><img src="blue.png" alt="Blue" /></td>
<td>rgb(0,0,255)</td>
</tr>
<tr>
<td><img src="yellow.png" alt="Yellow" /></td>
<td>rgb(255,255,0)</td>
</tr>
<tr>
<td><img src="magenta.png" alt="Magenta" /></td>
<td>rgb(255,0,255)</td>
</tr>
<tr>
<td><img src="cyan.png" alt="Cyan" /></td>
<td>rgb(0,255,255)</td>
</tr>
<tr>
<td><img src="gray.png" alt="Gray" /></td>
<td>rgb(192,192,192)</td>
</tr>
<tr>
<td><img src="white.png" alt="White" /></td>
<td>rgb(255,255,255)</td>
</tr>
</tbody>
</table>

### Example

Here are the examples to set background of an HTML tag by color code using rgb() values:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Colors by RGB code</title>
</head>
<body text="rgb(0,0,255)" bgcolor="rgb(0,255,0)">
<p>Use different color code for for body and table and see the result.</p>
</body>
</html>
```
Browser Safe Colors

Here is the list of 216 colors which are supposed to be safest and computer independent colors. These colors vary from hexa code 000000 to FFFFFF and they will be supported by all the computers having 256 color palette.

<table>
<thead>
<tr>
<th>000000</th>
<th>000033</th>
<th>000066</th>
<th>000099</th>
<th>0000CC</th>
<th>0000FF</th>
</tr>
</thead>
<tbody>
<tr>
<td>003300</td>
<td>003333</td>
<td>003366</td>
<td>003399</td>
<td>0033CC</td>
<td>0033FF</td>
</tr>
<tr>
<td>006600</td>
<td>006633</td>
<td>006666</td>
<td>006699</td>
<td>0066CC</td>
<td>0066FF</td>
</tr>
<tr>
<td>009900</td>
<td>009933</td>
<td>009966</td>
<td>009999</td>
<td>0099CC</td>
<td>0099FF</td>
</tr>
<tr>
<td>00CC00</td>
<td>00CC33</td>
<td>00CC66</td>
<td>00CC99</td>
<td>00CCCC</td>
<td>00CCFF</td>
</tr>
<tr>
<td>00FF00</td>
<td>00FF33</td>
<td>00FF66</td>
<td>00FF99</td>
<td>00FFCC</td>
<td>00FFFF</td>
</tr>
<tr>
<td>330000</td>
<td>330033</td>
<td>330066</td>
<td>330099</td>
<td>3300CC</td>
<td>3300FF</td>
</tr>
<tr>
<td>333300</td>
<td>333333</td>
<td>333366</td>
<td>333399</td>
<td>3333CC</td>
<td>3333FF</td>
</tr>
<tr>
<td>336600</td>
<td>336633</td>
<td>336666</td>
<td>336699</td>
<td>3366CC</td>
<td>3366FF</td>
</tr>
<tr>
<td>339900</td>
<td>339933</td>
<td>339966</td>
<td>339999</td>
<td>3399CC</td>
<td>3399FF</td>
</tr>
<tr>
<td>33CC00</td>
<td>33CC33</td>
<td>33CC66</td>
<td>33CC99</td>
<td>33CCCC</td>
<td>33CCFF</td>
</tr>
<tr>
<td>CCFF00</td>
<td>CCFF33</td>
<td>CCFF66</td>
<td>CCFF99</td>
<td>CCFFCC</td>
<td>CCFFFF</td>
</tr>
<tr>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>FF0000</td>
<td>FF0033</td>
<td>FF0066</td>
<td>FF0099</td>
<td>FF00CC</td>
<td>FF00FF</td>
</tr>
<tr>
<td>FF3300</td>
<td>FF3333</td>
<td>FF3366</td>
<td>FF3399</td>
<td>FF33CC</td>
<td>FF33FF</td>
</tr>
<tr>
<td>FF6600</td>
<td>FF6633</td>
<td>FF6666</td>
<td>FF6699</td>
<td>FF66CC</td>
<td>FF66FF</td>
</tr>
<tr>
<td>FF9900</td>
<td>FF9933</td>
<td>FF9966</td>
<td>FF9999</td>
<td>FF99CC</td>
<td>FF99FF</td>
</tr>
<tr>
<td>FFCC00</td>
<td>FFCC33</td>
<td>FFCC66</td>
<td>FFCC99</td>
<td>FFCCCC</td>
<td>FFCCFF</td>
</tr>
<tr>
<td>FFFF00</td>
<td>FFFF33</td>
<td>FFFF66</td>
<td>FFFF99</td>
<td>FFFFCF</td>
<td>FFFFFF</td>
</tr>
</tbody>
</table>
Fonts play a very important role in making a website more user friendly and increasing content readability. Font face and color depends entirely on the computer and browser that is being used to view your page but you can use HTML `<font>` tag to add style, size, and color to the text on your website. You can use a `<basefont>` tag to set all of your text to the same size, face, and color.

The font tag is having three attributes called **size**, **color**, and **face** to customize your fonts. To change any of the font attributes at any time within your webpage, simply use the `<font>` tag. The text that follows will remain changed until you close with the `</font>` tag. You can change one or all of the font attributes within one `<font>` tag.

**Note:** The font and basefont tags are deprecated and it is supposed to be removed in a future version of HTML. So they should not be used rather, it’s suggested to use CSS styles to manipulate your fonts. But still for learning purpose, this chapter will explain font and basefont tags in detail.

### Set Font Size

You can set content font size using **size** attribute. The range of accepted values is from 1(smallest) to 7(largest). The default size of a font is 3.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Setting Font Size</title>
</head>
<body>
<font size="1">Font size="1"</font><br />
<font size="2">Font size="2"</font><br />
<font size="3">Font size="3"</font><br />
<font size="4">Font size="4"</font><br />
<font size="5">Font size="5"</font><br />
<font size="6">Font size="6"</font><br />
<font size="7">Font size="7"</font>
</body>
</html>
```
Relative Font Size

You can specify how many sizes larger or how many sizes smaller than the preset font size should be. You can specify it like `<font size="+n">` or `<font size="-n">`

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>Relative Font Size</title>
</head>
<body>
  <font size="-1">Font size="-1"</font><br />
  <font size="+1">Font size="+1"</font><br />
  <font size="+2">Font size="+2"</font><br />
  <font size="+3">Font size="+3"</font><br />
  <font size="+4">Font size="+4"</font>
</body>
</html>
```

This will produce the following result:
Setting Font Face

You can set font face using `face` attribute but be aware that if the user viewing the page doesn't have the font installed, they will not be able to see it. Instead user will see the default font face applicable to the user's computer.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>Font Face</title>
</head>
<body>
<font face="Times New Roman" size="5">Times New Roman</font><br />
<font face="Verdana" size="5">Verdana</font><br />
<font face="Comic sans MS" size="5">Comic Sans MS</font><br />
<font face="WildWest" size="5">WildWest</font><br />
<font face="Bedrock" size="5">Bedrock</font><br />
</body>
</html>
```

This will produce the following result:

Times New Roman
Verdana
Comic Sans MS
WildWest
Bedrock

Specify alternate font faces

A visitor will only be able to see your font if they have that font installed on their computer. So, it is possible to specify two or more font face alternatives by listing the font face names, separated by a comma.

```html
<font face="arial,helvetica">
<font face="Lucida Calligraphy,Comic sans MS,Lucida Console">
```

When your page is loaded, their browser will display the first font face available. If none of the given fonts are installed, then it will display the default font face *Times New Roman*.

**Note:** Check a complete list of [HTML Standard Fonts](#).
Setting Font Color

You can set any font color you like using color attribute. You can specify the color that you want by either the color name or hexadecimal code for that color.

**Note:** You can check a complete list of [HTML Color Name with Codes](#).

### Example

```html
<!DOCTYPE html>
<html>
<head>
<title>Setting Font Color</title>
</head>
<body>
<font color="#FF00FF">This text is in pink</font>
<br/>
<font color="red">This text is red</font>
</body>
</html>
```

This will produce the following result:

This text is in pink
This text is red

### The `<basefont>` Element:

The `<basefont>` element is supposed to set a default font size, color, and typeface for any parts of the document that are not otherwise contained within a `<font>` tag. You can use the `<font>` elements to override the `<basefont>` settings.

The `<basefont>` tag also takes color, size and face attributes and it will support relative font setting by giving size a value of +1 for a size larger or -2 for two sizes smaller.

### Example

```html
<!DOCTYPE html>
<html>
<head>
<title>Setting Basefont Color</title>
</head>
<body>
<basefont face="arial, verdana, sans-serif" size="2" color="#ff0000">
<p>This is the page's default font.</p>
</basefont>
</body>
</html>
```
Example of the `<basefont>` Element

This is darkgray text with two sizes larger

It is a courier font, a size smaller and black in color.

This will produce the following result:

This is the page's default font.
HTML Forms are required, when you want to collect some data from the site visitor. For example, during user registration you would like to collect information such as name, email address, credit card, etc.

A form will take input from the site visitor and then will post it to a back-end application such as CGI, ASP Script or PHP script etc. The back-end application will perform required processing on the passed data based on defined business logic inside the application.

There are various form elements available like text fields, textarea fields, drop-down menus, radio buttons, checkboxes, etc.

The HTML `<form>` tag is used to create an HTML form and it has following syntax:

```html
<form action="Script URL" method="GET|POST">
    form elements like input, textarea etc.
</form>
```

**Form Attributes**

Apart from common attributes, following is a list of the most frequently used form attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>action</td>
<td>Backend script ready to process your passed data.</td>
</tr>
<tr>
<td>method</td>
<td>Method to be used to upload data. The most frequently used are GET and POST methods.</td>
</tr>
<tr>
<td>target</td>
<td>Specify the target window or frame where the result of the script will be displayed. It takes values like _blank, _self, _parent etc.</td>
</tr>
</tbody>
</table>
| enctype   | You can use the enctype attribute to specify how the browser encodes the data before it sends it to the server. Possible values are:  
application/x-www-form-urlencoded - This is the standard method most forms use in simple scenarios.  
multipart/form-data - This is used when you want to upload binary data in the form of files like image, word file etc. |

**Note:** You can refer to [Perl & CGI](#) for a detail on how form data upload works.
HTML Form Controls

There are different types of form controls that you can use to collect data using HTML form:

- Text Input Controls
- Checkboxes Controls
- Radio Box Controls
- Select Box Controls
- File Select boxes
- Hidden Controls
-Clickable Buttons
- Submit and Reset Button

Text Input Controls

There are three types of text input used on forms:

- **Single-line text input controls** - This control is used for items that require only one line of user input, such as search boxes or names. They are created using HTML `<input>` tag.

- **Password input controls** - This is also a single-line text input but it masks the character as soon as a user enters it. They are also created using HTML `<input>` tag.

- **Multi-line text input controls** - This is used when the user is required to give details that may be longer than a single sentence. Multi-line input controls are created using HTML `<textarea>` tag.

Single-line text input controls

This control is used for items that require only one line of user input, such as search boxes or names. They are created using HTML `<input>` tag.

Example

Here is a basic example of a single-line text input used to take first name and last name:

```html
<!DOCTYPE html>
<html>
<head>
<title>Text Input Control</title>
</head>
<body>
<form >
First name:  <input type="text" name="first_name" />
<br>
</form>
</body>
</html>
```
Last name: <input type="text" name="last_name" />

</form>
</body>
</html>

This will produce the following result:

First name: 
Last name: 

Attributes

Following is the list of attributes for <input> tag for creating text field.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>type</td>
<td>Indicates the type of input control and for text input control it will be set to text.</td>
</tr>
<tr>
<td>name</td>
<td>Used to give a name to the control which is sent to the server to be recognized and get the value.</td>
</tr>
<tr>
<td>value</td>
<td>This can be used to provide an initial value inside the control.</td>
</tr>
<tr>
<td>size</td>
<td>Allows to specify the width of the text-input control in terms of characters.</td>
</tr>
<tr>
<td>maxlength</td>
<td>Allows to specify the maximum number of characters a user can enter into the text box.</td>
</tr>
</tbody>
</table>

Password Input controls

This is also a single-line text input but it masks the character as soon as a user enters it. They are also created using HTML <input> tag but type attribute is set to password.

Example

Here is a basic example of a single-line password input used to take user password:

```html
<!DOCTYPE html>
<html>
<head>
<title>Password Input Control</title>
</head>
```
This will produce the following result:

User ID : 

Password:

**Attributes**

Following is the list of attributes for `<input>` tag for creating password field.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>type</td>
<td>Indicates the type of input control and for password input control it will be set to password.</td>
</tr>
<tr>
<td>name</td>
<td>Used to give a name to the control which is sent to the server to be recognized and get the value.</td>
</tr>
<tr>
<td>value</td>
<td>This can be used to provide an initial value inside the control.</td>
</tr>
<tr>
<td>size</td>
<td>Allows to specify the width of the text-input control in terms of characters.</td>
</tr>
<tr>
<td>maxlength</td>
<td>Allows to specify the maximum number of characters a user can enter into the text box.</td>
</tr>
</tbody>
</table>

**Multiple-Line Text Input Controls**

This is used when the user is required to give details that may be longer than a single sentence. Multi-line input controls are created using HTML `<textarea>` tag.
**Example**

Here is a basic example of a multi-line text input used to take item description:

```html
<!DOCTYPE html>
<html>
<head>
<title>Multiple-Line Input Control</title>
</head>
<body>
<form>
Description: <br/>
<textarea rows="5" cols="50" name="description">
Enter description here...
</textarea>
</form>
</body>
</html>
```

This will produce the following result:

Description

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Attributes**

Following is the list of attributes for `<textarea>` tag.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>Used to give a name to the control which is sent to the server to be recognized and get the value.</td>
</tr>
<tr>
<td>rows</td>
<td>Indicates the number of rows of text area box.</td>
</tr>
<tr>
<td>cols</td>
<td>Indicates the number of columns of text area box</td>
</tr>
</tbody>
</table>
**Checkbox Control**

Checkboxes are used when more than one option is required to be selected. They are also created using HTML `<input>` tag but type attribute is set to `checkbox`.

**Example**

Here is an example HTML code for a form with two checkboxes:

```html
<!DOCTYPE html>
<html>
<head>
<title>Checkbox Control</title>
</head>
<body>
<form>
<input type="checkbox" name="maths" value="on"> Maths
<input type="checkbox" name="physics" value="on"> Physics
</form>
</body>
</html>
```

This will produce the following result:

☐ Maths ☑ Physics

**Attributes**

Following is the list of attributes for `<checkbox>` tag.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>type</td>
<td>Indicates the type of input control and for checkbox input control it will be set to checkbox.</td>
</tr>
<tr>
<td>name</td>
<td>Used to give a name to the control which is sent to the server to be recognized and get the value.</td>
</tr>
<tr>
<td>value</td>
<td>The value that will be used if the checkbox is selected.</td>
</tr>
<tr>
<td>checked</td>
<td>Set to <code>checked</code> if you want to select it by default.</td>
</tr>
</tbody>
</table>
Radio Button Control

Radio buttons are used when out of many options, just one option is required to be selected. They are also created using HTML <input> tag but type attribute is set to radio.

Example

Here is example HTML code for a form with two radio buttons:

```html
<!DOCTYPE html>
<html>
<head>
<title>Radio Box Control</title>
</head>
<body>
<form>
<input type="radio" name="subject" value="maths"> Maths
<input type="radio" name="subject" value="physics"> Physics
</form>
</body>
</html>
```

This will produce the following result:

〇 Maths ☑ Physics

Attributes

Following is the list of attributes for radio button.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>type</td>
<td>Indicates the type of input control and for checkbox input control it will be set to radio.</td>
</tr>
<tr>
<td>name</td>
<td>Used to give a name to the control which is sent to the server to be recognized and get the value.</td>
</tr>
<tr>
<td>value</td>
<td>The value that will be used if the radio box is selected.</td>
</tr>
<tr>
<td>checked</td>
<td>Set to checked if you want to select it by default.</td>
</tr>
</tbody>
</table>
Select Box Control

A select box, also called drop down box which provides option to list down various options in the form of drop down list, from where a user can select one or more options.

Example

Here is example HTML code for a form with one drop down box

```html
<!DOCTYPE html>
<html>
<head>
<title>Select Box Control</title>
</head>
<body>
<form>
<select name="dropdown">
<option value="Maths" selected>Maths</option>
<option value="Physics">Physics</option>
</select>
</form>
</body>
</html>
```

This will produce the following result:

Maths

Attributes

Following is the list of important attributes of `<select>` tag:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>Used to give a name to the control which is sent to the server to be recognized and get the value.</td>
</tr>
<tr>
<td>size</td>
<td>This can be used to present a scrolling list box.</td>
</tr>
<tr>
<td>multiple</td>
<td>If set to &quot;multiple&quot; then allows a user to select multiple items from the menu.</td>
</tr>
</tbody>
</table>
Following is the list of important attributes of `<option>` tag:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>value</td>
<td>The value that will be used if an option in the select box box is selected.</td>
</tr>
<tr>
<td>selected</td>
<td>Specifies that this option should be the initially selected value when the page loads.</td>
</tr>
<tr>
<td>label</td>
<td>An alternative way of labeling options</td>
</tr>
</tbody>
</table>

**File Upload Box**

If you want to allow a user to upload a file to your web site, you will need to use a file upload box, also known as a file select box. This is also created using the `<input>` element but type attribute is set to `file`.

**Example**

Here is example HTML code for a form with one file upload box:

```html
<!DOCTYPE html>
<html>
<head>
<title>File Upload Box</title>
</head>
<body>
<form>
<input type="file" name="fileupload" accept="image/*" />
</form>
</body>
</html>
```

This will produce the following result:

**Attributes**

Following is the list of important attributes of file upload box:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>Used to give a name to the control which is sent to the server to be recognized and get the value.</td>
</tr>
<tr>
<td>accept</td>
<td>Specifies the types of files that the server accepts.</td>
</tr>
</tbody>
</table>

**Button Controls**

There are various ways in HTML to create clickable buttons. You can also create a clickable button using `<input>` tag by setting its type attribute to **button**. The type attribute can take the following values:

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>submit</td>
<td>This creates a button that automatically submits a form.</td>
</tr>
<tr>
<td>reset</td>
<td>This creates a button that automatically resets form controls to their initial values.</td>
</tr>
<tr>
<td>button</td>
<td>This creates a button that is used to trigger a client-side script when the user clicks that button.</td>
</tr>
<tr>
<td>image</td>
<td>This creates a clickable button but we can use an image as background of the button.</td>
</tr>
</tbody>
</table>

**Example**

Here is example HTML code for a form with three types of buttons:

```html
<!DOCTYPE html>
<html>
<head>
<title>File Upload Box</title>
</head>
<body>
<form>
<input type="submit" name="submit" value="Submit" />
<input type="reset" name="reset" value="Reset" />
<input type="button" name="ok" value="OK" />
<input type="image" name="imagebutton" src="/html/images/logo.png" />
</form>
</body>
</html>
```
Hidden Form Controls

Hidden form controls are used to hide data inside the page which later on can be pushed to the server. This control hides inside the code and does not appear on the actual page. For example, following hidden form is being used to keep current page number. When a user will click next page then the value of hidden control will be sent to the web server and there it will decide which page will be displayed next based on the passed current page.

Example

Here is example HTML code to show the usage of hidden control:

```html
<!DOCTYPE html>
<html>
<head>
<title>File Upload Box</title>
</head>
<body>
<form>
<p>This is page 10</p>
<input type="hidden" name="pagename" value="10" />
<input type="submit" name="submit" value="Submit" />
<input type="reset" name="reset" value="Reset" />
</form>
</body>
</html>
```

This will produce the following result:

Top of Form
This is page 10
Sometimes you need to add music or video into your web page. The easiest way to add video or sound to your web site is to include the special HTML tag called `<embed>`. This tag causes the browser itself to include controls for the multimedia automatically provided browser supports `<embed>` tag and given media type.

You can also include a `<noembed>` tag for the browsers which don't recognize the `<embed>` tag. You could, for example, use `<embed>` to display a movie of your choice, and `<noembed>` to display a single JPG image if browser does not support `<embed>` tag.

**Example**

Here is a simple example to play an embedded midi file:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML embed Tag</title>
</head>
<body>
<embed src="/html/yourfile.mid" width="100%" height="60">
    <noembed><img src="yourimage.gif" alt="Alternative Media"></noembed>
</embed>
</body>
</html>
```

This will produce the following result:

You can put any media file in src attribute. You can try it yourself by giving various types of files.
The `<embed>` Tag Attributes

Following is the list of important attributes which can be used with `<embed>` tag.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>align</td>
<td>Determines how to align the object. It can be set to either center, left or right.</td>
</tr>
<tr>
<td>autostart</td>
<td>This boolean attribute indicates if the media should start automatically. You can set it either true or false.</td>
</tr>
<tr>
<td>loop</td>
<td>Specifies if the sound should be played continuously (set loop to true), a certain number of times (a positive value) or not at all (false)</td>
</tr>
<tr>
<td>playcount</td>
<td>Specifies the number of times to play the sound. This is alternate option for <code>loop</code> if you are using IE.</td>
</tr>
<tr>
<td>hidden</td>
<td>Specifies if the multimedia object should be shown on the page. A false value means no and true values means yes.</td>
</tr>
<tr>
<td>width</td>
<td>Width of the object in pixels</td>
</tr>
<tr>
<td>height</td>
<td>Height of the object in pixels</td>
</tr>
<tr>
<td>name</td>
<td>A name used to reference the object.</td>
</tr>
<tr>
<td>src</td>
<td>URL of the object to be embedded.</td>
</tr>
<tr>
<td>volume</td>
<td>Controls volume of the sound. Can be from 0 (off) to 100 (full volume).</td>
</tr>
</tbody>
</table>

Supported Video Types

You can use various media types like Flash movies (.swf), AVI’s (.avi), and MOV’s (.mov) file types inside embed tag.

- .swf files - are the file types created by Macromedia's Flash program.
- .wmv files - are Microsoft's Windows Media Video file types.
- .mov files - are Apple’s Quick Time Movie format.
- .mpeg files - are movie files created by the Moving Pictures Expert Group.

```html
<!DOCTYPE html>
<html>
<head>
</head>
</html>
```
Background Audio

You can use HTML `<bgsound>` tag to play a soundtrack in the background of your webpage. This tag is supported by Internet Explorer only and most of the other browsers ignore this tag. It downloads and plays an audio file when the host document is first downloaded by the user and displayed. The background sound file also will replay whenever the user refreshes the browser.

This tag is having only two attributes `loop` and `src`. Both these attributes have same meaning as explained above.

Here is a simple example to play a small midi file:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML embed Tag</title>
</head>
<body>
<bgsound src="/html/yourfile.mid">
   <noembed><img src="yourimage.gif" alt="Alternative Media" ></noembed>
</bgsound>
</body>
</html>
```
This will produce the blank screen. This tag does not display any component and remains hidden.

Internet Explorer can also handle only three different sound format files: wav, the native format for PCs; au, the native format for most Unix workstations; and MIDI, a universal music-encoding scheme.

**HTML Object tag**

HTML 4 introduces the `<object>` element, which offers an all-purpose solution to generic object inclusion. The `<object>` element allows HTML authors to specify everything required by an object for its presentation by a user agent.

Here are a few examples:

**Example - 1**

You can embed an HTML document in an HTML document itself as follows:

```html
<object data="data/test.htm" type="text/html" width="300" height="200">
  alt : <a href="data/test.htm">test.htm</a>
</object>
```

Here `alt` attribute will come into picture if browser does not support `object` tag.

**Example - 2**

You can embed a PDF document in an HTML document as follows:

```html
<object data="data/test.pdf" type="application/pdf" width="300" height="200">
  alt : <a href="data/test.pdf">test.htm</a>
</object>
```

**Example - 3**

You can specify some parameters related to the document with the `<param>` tag. Here is an example to embed a wav file:

```html
<object data="data/test.wav" type="audio/x-wav" width="200" height="20">
  <param name="src" value="data/test.wav">
  <param name="autoplay" value="false">
  <param name="autoStart" value="0">
  alt : <a href="data/test.wav">test.wav</a>
</object>
```

**Example - 4**
You can add a flash document as follows:

```html
<object classid="clsid:D27CDB6E-AE6D-11cf-96B8-444553554000" id="penguin"
    codebase="someplace/swflash.cab" width="200" height="300">
    <param name="movie" value="flash/penguin.swf" />
    <param name="quality" value="high" />
    <img src="penguin.jpg" width="200" height="300" alt="Penguin" />
</object>
```

**Example - 5**

You can add a java applet into HTML document as follows:

```html
<object classid="clsid:8ad9c840-044e-11d1-b3e9-00805f499d93"
    width="200" height="200">
    <param name="code" value="applet.class" />
</object>
```

The **classid** attribute identifies which version of Java Plug-in to use. You can use the optional **codebase** attribute to specify if and how to download the JRE.
An HTML marquee is a scrolling piece of text displayed either horizontally across or vertically down your webpage depending on the settings. This is created by using HTML <marquees> tag.

**Note:** The HTML <marquee> tag may not be supported by various browsers so it is not recommended to rely on this tag, instead you can use JavaScript and CSS to create such effects.

**Syntax**

A simple syntax to use HTML <marquee> tag is as follows:

```html
<marquee attribute_name="attribute_value"....more attributes>
    One or more lines or text message or image
</marquee>
```

**The <marquee> Tag Attributes**

Following is the list of important attributes which can be used with <marquee> tag.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>width</td>
<td>This specifies the width of the marquee. This can be a value like 10 or 20% etc.</td>
</tr>
<tr>
<td>height</td>
<td>This specifies the height of the marquee. This can be a value like 10 or 20% etc.</td>
</tr>
<tr>
<td>direction</td>
<td>This specifies the direction in which marquee should scroll. This can be a value like up, down, left or right.</td>
</tr>
<tr>
<td>behavior</td>
<td>This specifies the type of scrolling of the marquee. This can have a value like scroll, slide and alternate.</td>
</tr>
<tr>
<td>scrolldelay</td>
<td>This specifies how long to delay between each jump. This will have a value like 10 etc.</td>
</tr>
</tbody>
</table>
scrollamount | This specifies the speed of marquee text. This can have a value like 10 etc.
--- | ---
loop | This specifies how many times to loop. The default value is INFINITE, which means that the marquee loops endlessly.
bgcolor | This specifies background color in terms of color name or color hex value.
hspace | This specifies horizontal space around the marquee. This can be a value like 10 or 20% etc.
vspace | This specifies vertical space around the marquee. This can be a value like 10 or 20% etc.

Below are few examples to demonstrate the usage of marquee tag.

**Examples - 1**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML marquee Tag</title>
</head>
<body>
<marquee>This is basic example of marquee</marquee>
</body>
</html>
```

This will produce the following result:

This is basic example of marquee

**Examples - 2**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML marquee Tag</title>
</head>
<body>
<marquee width="50%">This example will take only 50% width</marquee>
</body>
</html>
```
This will produce the following result:

```
This is basic example of marquee
```

**Examples - 3**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML marquee Tag</title>
</head>
<body>
<marquee direction="right">This text will scroll from left to right</marquee>
</body>
</html>
```

This will produce the following result:

```
This is basic example of marquee
```

**Examples - 4**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML marquee Tag</title>
</head>
<body>
<marquee direction="up">This text will scroll from bottom to up</marquee>
</body>
</html>
```

This will produce the following result:

```
This text will scroll from bottom to up
```
We have learnt that a typical HTML document will have following structure:

```html
document declration tag
<html>
  <head>
    Document header related tags
  </head>

  <body>
    Document body related tags
  </body>
</html>
```

This chapter will give a little more detail about header part which is represented by HTML <head> tag. The <head> tag is a container of various important tags like <title>, <meta>, <link>, <base>, <style>, <script>, and <noscript> tags.

### The HTML <title> Tag

The HTML <title> tag is used for specifying the title of the HTML document. Following is an example to give a title to an HTML document:

```html
<!DOCTYPE html>
<html>
  <head>
    <title>HTML Title Tag Example</title>
  </head>
  <body>
    <p>Hello, World!</p>
  </body>
</html>
```

This will produce the following result:

Hello, World!
The HTML <meta> Tag

The HTML <meta> tag is used to provide metadata about the HTML document which includes information about page expiry, page author, list of keywords, page description etc.

Following are few of the important usages of <meta> tag inside an HTML document:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Meta Tag Example</title>

<!-- Provide list of keywords -->
<meta name="keywords" content="C, C++, Java, PHP, Perl, Python">

<!-- Provide description of the page -->
<meta name="description" content="Simply Easy Learning by Tutorials Point">

<!-- Author information -->
<meta name="author" content="Tutorials Point">

<!-- Page content type -->
<meta http-equiv="content-type" content="text/html; charset=UTF-8">

<!-- Page refreshing delay -->
<meta http-equiv="refresh" content="30">

<!-- Page expiry -->
<meta http-equiv="expires" content="Wed, 21 June 2006 14:25:27 GMT">

<!-- Tag to tell robots not to index the content of a page -->
<meta name="robots" content="noindex, nofollow">

</head>
<body>
<p>Hello, World!</p>
</body>
</html>
```
This will produce the following result:

Hello, World!

**The HTML `<base>` Tag**

The HTML `<base>` tag is used for specifying the base URL for all relative URLs in a page, which means all the other URLs will be concatenated into base URL while locating for the given item.

For example, all the given pages and images will be searched after prefixing the given URLs with base URL http://www.tutorialspoint.com/ directory:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Base Tag Example</title>
<base href="http://www.tutorialspoint.com/"/>
</head>
<body>
<img src="/images/logo.png" alt="Logo Image"/>
<a href="/html/index.htm" title="HTML Tutorial">HTML Tutorial</a>
</body>
</html>
```

This will produce the following result:

![Tutorialspoint Logo](http://www.tutorialspoint.com/images/logo.png) [HTML Tutorial](http://www.tutorialspoint.com/html/index.htm)

But if you change base URL to something else, for example, if base URL is http://www.tutorialspoint.com/home then image and other given links will become like http://www.tutorialspoint.com/home/images/logo.png and http://www.tutorialspoint.com/home/html/index.htm

**The HTML `<link>` Tag**

The HTML `<link>` tag is used to specify relationships between the current document and external resource. Following is an example to link an external style sheet file available in css sub-directory within web root:

```html``
The HTML <style> Tag

The HTML <style> tag is used to specify style sheet for the current HTML document. Following is an example to define few style sheet rules inside <style> tag:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML style Tag Example</title>
<!--base href="http://www.tutorialspoint.com/" />
<link rel="stylesheet" type="text/css" href="/css/style.css">
</head>
<body>
<p class="myclass">Hello, World!</p>
</body>
</html>
```

This will produce the following result:

```
Hello, World!
```
This will produce the following result:

Hello, World!

Note: To learn about how Cascading Style Sheet works, kindly check a separate tutorial available at http://www.tutorialspoint.com/css

The HTML <script> Tag

The HTML <script> tag is used to include either external script file or to define internal script for the HTML document. Following is an example where we are using JavaScript to define a simple JavaScript function:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML script Tag Example</title>
<base href="http://www.tutorialspoint.com/" />
<script type="text/JavaScript">
function Hello()
    {alert("Hello, World");
    }
</script>
</head>
<body>
<input type="button" onclick="Hello();" name="ok" value="OK" />
</body>
</html>
```

This will produce the following result, where you can try to click on the given button:

OK

Note: To learn about how JavaScript works, kindly check a separate tutorial available at: http://www.tutorialspoint.com/javascript
Cascading Style Sheets (CSS) describe how documents are presented on screens, in print, or perhaps how they are pronounced. W3C has actively promoted the use of style sheets on the Web since the consortium was founded in 1994.

Cascading Style Sheets (CSS) provide easy and effective alternatives to specify various attributes for the HTML tags. Using CSS, you can specify a number of style properties for a given HTML element. Each property has a name and a value, separated by a colon (:). Each property declaration is separated by a semi-colon (;).

**Example**

First let's consider an example of HTML document which makes use of `<font>` tag and associated attributes to specify text color and font size:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML CSS</title>
</head>
<body>
<p><font color="green" size="5">Hello, World!</font></p>
</body>
</html>
```

We can re-write above example with the help of Style Sheet as follows:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML CSS</title>
</head>
<body>
<p style="color:green;font-size:24px;">Hello, World!</p>
</body>
</html>
```

This will produce the following result:

**Hello, World!**
You can use CSS in three ways in your HTML document:

- **External Style Sheet**: Define style sheet rules in a separate .css file and then include that file in your HTML document using HTML `<link>` tag.

- **Internal Style Sheet**: Define style sheet rules in header section of the HTML document using `<style>` tag.

- **Inline Style Sheet**: Define style sheet rules directly along-with the HTML elements using `style` attribute.

Let's see all the three cases one by one with the help of suitable examples.

### External Style Sheet

If you need to use your style sheet to various pages, then its always recommended to define a common style sheet in a separate file. A cascading style sheet file will have extension as `.css` and it will be included in HTML files using `<link>` tag.

#### Example

Consider we define a style sheet file `style.css` which has following rules:

```css
.red{
    color: red;
}
.thick{
    font-size:20px;
}
.green{
    color:green;
}
```

Here we defined three CSS rules which will be applicable to three different classes defined for the HTML tags. I suggest you should not bother about how these rules are being defined because you will learn them while studying CSS. Now let's make use of the above external CSS file in our following HTML document:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML External CSS</title>
<link rel="stylesheet" type="text/css" href="/html/style.css">
</head>
<body>
<p class="red">This is red</p>
</body>
</html>
```
This will produce the following result:

This is red

This is thick

This is green

This is thick and green

Internal Style Sheet

If you want to apply Style Sheet rules to a single document only, then you can include those rules in header section of the HTML document using <style> tag.

Rules defined in internal style sheet overrides the rules defined in an external CSS file.

Example

Let's re-write above example once again, but here we will write style sheet rules in the same HTML document using <style> tag:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Internal CSS</title>
<style type="text/css">
.red{
    color: red;
}
.thick{
    font-size:20px;
}
.green{
```
This will produce the following result:

This is red

This is thick

This is green

This is thick and green

**Inline Style Sheet**

You can apply style sheet rules directly to any HTML element using `style` attribute of the relevant tag. This should be done only when you are interested to make a particular change in any HTML element only.

Rules defined inline with the element overrides the rules defined in an external CSS file as well as the rules defined in `<style>` element.

**Example**

Let's re-write above example once again, but here we will write style sheet rules along with the HTML elements using `style` attribute of those elements.
This will produce the following result:

This is red

This is thick

This is green

This is thick and green
A **script** is a small piece of program that can add interactivity to your website. For example, a script could generate a pop-up alert box message, or provide a dropdown menu. This script could be written using JavaScript or VBScript.

You can write various small functions, called event handlers using any of the scripting language and then you can trigger those functions using HTML attributes.

Now-a-days, only **JavaScript** and associated frameworks are being used by most of the web developers, VBScript is not even supported by various major browsers.

You can keep JavaScript code in a separate file and then include it wherever it's needed, or you can define functionality inside HTML document itself. Let's see both the cases one by one with suitable examples.

### External JavaScript

If you are going to define a functionality which will be used in various HTML documents then it's better to keep that functionality in a separate JavaScript file and then include that file in your HTML documents. A JavaScript file will have extension as `.js` and it will be included in HTML files using `<script>` tag.

### Example

Consider we define a small function using JavaScript in `script.js` which has following code:

```javascript
function Hello()
{
    alert("Hello, World");
}
```

Now let's make use of the above external JavaScript file in our following HTML document:

```html
<!DOCTYPE html>
<html>
<head>
<title>JavaScript External Script</title>
<script src="/html/script.js" type="text/JavaScript="/></script>
</head>
<body>
<input type="button" onclick="Hello();" name="ok" value="Click Me" />
</body>
</html>
```
**Internal Script**

You can write your script code directly into your HTML document. Usually we keep script code in header of the document using `<script>` tag, otherwise there is no restriction and you can put your source code anywhere in the document but inside `<script>` tag.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>JavaScript Internal Script</title>
<script type="text/JavaScript">
function Hello()
{
    alert("Hello, World");
}
</script>
</head>
<body>
<input type="button" onclick="Hello();" name="ok" value="Click Me" />
</body>
</html>
```

This will produce the following result, where you can try to click on the given button:

![Click Me Button](image)
**Event Handlers**

Event handlers are nothing but simply defined functions which can be called against any mouse or keyboard event. You can define your business logic inside your event handler which can vary from a single to 1000s of line code.

Following example explains how to write an event handler. Let's write one simple function `EventHandler()` in the header of the document. We will call this function when any user brings mouse over a paragraph.

```html
<!DOCTYPE html>
<html>
<head>
<title>Event Handlers Example</title>
<base href="http://www.tutorialspoint.com/" />
<script type="text/JavaScript">
function EventHandler(){
    alert("I'm event handler!!");
}
</script>
</head>
<body>
<p onmouseover="EventHandler();">Bring your mouse here to see an alert</p>
</body>
</html>
```

Now This will produce the following result. Bring your mouse over this line and see the result:

Bring your mouse here to see an alert

**Hide Scripts from Older Browsers**

Although most (if not all) browsers these days support JavaScript, but still some older browsers don't. If a browser doesn't support JavaScript, instead of running your script, it would display the code to the user. To prevent this, you can simply place HTML comments around the script as shown below.
The `<noscript>` Element

You can also provide alternative info to the users whose browsers don't support scripts and for those users who have disabled script option their browsers. You can do this using the `<noscript>` tag.

```
JavaScript Example:
<script type="text/JavaScript">
<!--
document.write("Hello JavaScript!");
//-->
</script>

<noscript>Your browser does not support JavaScript!</noscript>

VBScript Example:
<script type="text/vbscript">
<!--
document.write("Hello VBScript!");
'-->  
</script>

<noscript>Your browser does not support VBScript!</noscript>
```

Default Scripting Language

There may be a situation when you will include multiple script files and ultimately using multiple `<script>` tags. You can specify a default scripting language for all your `<script>` tags.
This saves you from specifying the language every time you use a script tag within the page. Below is the example:

```html
<meta http-equiv="Content-Script-Type" content="text/JavaScript" />
```

Note that you can still override the default by specifying a language within the script tag.
A webpage layout is very important to give better look to your website. It takes considerable time to design a website's layout with great look and feel.

Now-a-days, all modern websites are using CSS and JavaScript based framework to come up with responsive and dynamic websites but you can create a good layout using simple HTML tables or division tags in combination with other formatting tags. This chapter will give you few examples on how to create a simple but working layout for your webpage using pure HTML and its attributes.

**HTML Layout - Using Tables**

The simplest and most popular way of creating layouts is using HTML `<table>` tag. These tables are arranged in columns and rows, so you can utilize these rows and columns in whatever way you like.

**Example**

For example, the following HTML layout example is achieved using a table with 3 rows and 2 columns but the header and footer column spans both columns using the colspan attribute:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Layout using Tables</title>
</head>
<body>
<table width="100%" border="0">
<tr>
  <td colspan="2" bgcolor="#b5dcb3">
    <h1>This is Web Page Main title</h1>
  </td>
</tr>
<tr valign="top">
  <td bgcolor="#aaa" width="50">
    <b>Main Menu</b>
    HTML<br />
    PHP<br />
    PERL...
  </td>
</tr>
</table>
</body>
</html>
```
Multiple Columns Layout - Using Tables

You can design your webpage to put your web content in multiple pages. You can keep your content in middle column and you can use left column to use menu and right column can be used to put advertisement or some other stuff. This layout will be very similar to what we have at our website tutorialspoint.com.
Example

Here is an example to create three column layout:

```html
<!DOCTYPE html>
<html>
<head>
<title>Three Column HTML Layout</title>
</head>
<body>
<table width="100%" border="0">
<tr valign="top">
<td bgcolor="#aaa" width="20%">
<b>Main Menu</b><br/>
HTML<br/>
PHP<br/>
PERL...
</td>
<td bgcolor="#b5dcb3" height="200" width="60%">
Technical and Managerial Tutorials
</td>
<td bgcolor="#aaa" width="20%">
<b>Right Menu</b><br/>
HTML<br/>
PHP<br/>
PERL...
</td>
</tr>
</table>
</body>
</html>
```
This will produce the following result:

<table>
<thead>
<tr>
<th>Main Menu</th>
<th>Technical and Managerial Tutorials</th>
<th>Right Menu</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTML</td>
<td></td>
<td>HTML</td>
</tr>
<tr>
<td>PHP</td>
<td></td>
<td>PHP</td>
</tr>
<tr>
<td>PERL...</td>
<td></td>
<td>PERL...</td>
</tr>
</tbody>
</table>

**HTML Layouts - Using DIV, SPAN**

The `<div>` element is a block level element used for grouping HTML elements. While the `<div>` tag is a block-level element, the HTML `<span>` element is used for grouping elements at an inline level.

Although we can achieve pretty nice layouts with HTML tables, but tables weren’t really designed as a layout tool. Tables are more suited to presenting tabular data.

**Note:** This example makes use of Cascading Style Sheet (CSS), so before understanding this example you need to have a better understanding on how CSS works.

**Example**

Here we will try to achieve same result using `<div>` tag along with CSS, whatever you have achieved using `<table>` tag in previous example.

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Layouts using DIV, SPAN</title>
</head>
<body>
<div style="width:100%">
    <div style="background-color:#b5dcb3; width:100%">
        <h1>This is Web Page Main title</h1>
    </div>
    <div style="background-color:#aaa; height:200px; width:100px; float:left;">
        <div><b>Main Menu</b></div>
        HTML<br/>
        PHP<br/>
        PERL...
    </div>
</div>
```

141
You can create better layout using DIV, SPAN along with CSS. For more information on CSS, please refer to CSS Tutorial.
Following tags have been introduced in older versions of HTML but all the tags marked with are part of HTML-5.

<table>
<thead>
<tr>
<th>Tag</th>
<th>Description</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;!--...--&gt;</td>
<td>Specifies a comment</td>
<td></td>
</tr>
<tr>
<td>&lt;!DOCTYPE&gt;</td>
<td>Specifies the document type</td>
<td></td>
</tr>
<tr>
<td>&lt;a&gt;</td>
<td>Specifies an anchor</td>
<td></td>
</tr>
<tr>
<td>&lt;abbr&gt;</td>
<td>Specifies an abbreviation</td>
<td></td>
</tr>
<tr>
<td>&lt;acronym&gt;</td>
<td>Specifies an acronym</td>
<td></td>
</tr>
<tr>
<td>&lt;address&gt;</td>
<td>Specifies an address element</td>
<td></td>
</tr>
<tr>
<td>&lt;applet&gt;</td>
<td>Deprecated. Specifies an applet</td>
<td></td>
</tr>
<tr>
<td>&lt;area&gt;</td>
<td>Specifies an area inside an image map</td>
<td></td>
</tr>
<tr>
<td>&lt;article&gt;</td>
<td>Specifies an article</td>
<td></td>
</tr>
<tr>
<td>&lt;aside&gt;</td>
<td>Specifies some content loosely related to the page content. If it is removed, the remaining content still makes sense</td>
<td></td>
</tr>
<tr>
<td>&lt;audio&gt;</td>
<td>Specifies a sound content</td>
<td></td>
</tr>
<tr>
<td>&lt;b&gt;</td>
<td>Specifies bold text</td>
<td></td>
</tr>
<tr>
<td>&lt;base&gt;</td>
<td>Specifies a base URL for all the links in a page</td>
<td></td>
</tr>
<tr>
<td>&lt;basefont&gt;</td>
<td>Deprecated. Specifies a base font</td>
<td></td>
</tr>
<tr>
<td>Tag</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>&lt;bdo&gt;</td>
<td>Specifies the direction of text display</td>
<td></td>
</tr>
<tr>
<td>&lt;bdi&gt;</td>
<td>Represents text that must be isolated from its surrounding for bidirectional text formatting. It allows embedding a span of text with a different, or unknown, directionality.</td>
<td></td>
</tr>
<tr>
<td>&lt;bgsound&gt;</td>
<td>Specifies background music</td>
<td></td>
</tr>
<tr>
<td>&lt;big&gt;</td>
<td>Specifies big text</td>
<td></td>
</tr>
<tr>
<td>&lt;blink&gt;</td>
<td>Specifies a text which blinks</td>
<td></td>
</tr>
<tr>
<td>&lt;blockquote&gt;</td>
<td>Specifies a long quotation</td>
<td></td>
</tr>
<tr>
<td>&lt;body&gt;</td>
<td>Specifies the body element</td>
<td></td>
</tr>
<tr>
<td>&lt;br&gt;</td>
<td>Inserts a single line break</td>
<td></td>
</tr>
<tr>
<td>&lt;button&gt;</td>
<td>Specifies a push button</td>
<td></td>
</tr>
<tr>
<td>&lt;canvas&gt;</td>
<td>For making graphics with a script</td>
<td></td>
</tr>
<tr>
<td>&lt;caption&gt;</td>
<td>Specifies a table caption</td>
<td></td>
</tr>
<tr>
<td>&lt;center&gt;</td>
<td>Deprecated. Specifies centered text</td>
<td></td>
</tr>
<tr>
<td>&lt;cite&gt;</td>
<td>Specifies a citation</td>
<td></td>
</tr>
<tr>
<td>&lt;code&gt;</td>
<td>Specifies computer code text</td>
<td></td>
</tr>
<tr>
<td>&lt;col&gt;</td>
<td>Specifies attributes for table columns</td>
<td></td>
</tr>
<tr>
<td>&lt;colgroup&gt;</td>
<td>Specifies groups of table columns</td>
<td></td>
</tr>
<tr>
<td>&lt;comment&gt;</td>
<td>Puts a comment in the document</td>
<td></td>
</tr>
<tr>
<td>&lt;datalist&gt;</td>
<td>A list of options for input values</td>
<td></td>
</tr>
<tr>
<td>Tag</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><code>&lt;dd&gt;</code></td>
<td>Specifies a definition description</td>
<td></td>
</tr>
<tr>
<td><code>&lt;del&gt;</code></td>
<td>Specifies deleted text</td>
<td></td>
</tr>
<tr>
<td><code>&lt;dfn&gt;</code></td>
<td>Specifies a definition term</td>
<td></td>
</tr>
<tr>
<td><code>&lt;dialog&gt;</code></td>
<td>Specifies a dialog box or window</td>
<td></td>
</tr>
<tr>
<td><code>&lt;dir&gt;</code></td>
<td>Deprecated. Specifies a directory list</td>
<td></td>
</tr>
<tr>
<td><code>&lt;div&gt;</code></td>
<td>Specifies a section in a document</td>
<td></td>
</tr>
<tr>
<td><code>&lt;dl&gt;</code></td>
<td>Specifies a definition list</td>
<td></td>
</tr>
<tr>
<td><code>&lt;dt&gt;</code></td>
<td>Specifies a definition term</td>
<td></td>
</tr>
<tr>
<td><code>&lt;em&gt;</code></td>
<td>Specifies emphasized text</td>
<td></td>
</tr>
<tr>
<td><code>&lt;embed&gt;</code></td>
<td>Specifies a container for an external (non-HTML) application</td>
<td></td>
</tr>
<tr>
<td><code>&lt;fieldset&gt;</code></td>
<td>Specifies a fieldset</td>
<td></td>
</tr>
<tr>
<td><code>&lt;figcaption&gt;</code></td>
<td>Specifies a caption for a <code>&lt;figure&gt;</code> element</td>
<td></td>
</tr>
<tr>
<td><code>&lt;figure&gt;</code></td>
<td>Specifies self-contained content</td>
<td></td>
</tr>
<tr>
<td><code>&lt;font&gt;</code></td>
<td>Deprecated. Specifies text font, size, and color</td>
<td></td>
</tr>
<tr>
<td><code>&lt;footer&gt;</code></td>
<td>Specifies a footer for a document or section</td>
<td></td>
</tr>
<tr>
<td><code>&lt;form&gt;</code></td>
<td>Specifies a form</td>
<td></td>
</tr>
<tr>
<td><code>&lt;frame&gt;</code></td>
<td>Specifies a sub window (a frame)</td>
<td></td>
</tr>
<tr>
<td><code>&lt;frameset&gt;</code></td>
<td>Specifies a set of frames</td>
<td></td>
</tr>
<tr>
<td><code>&lt;h1&gt;</code> to <code>&lt;h6&gt;</code></td>
<td>Specifies header 1 to header 6</td>
<td></td>
</tr>
<tr>
<td>Tag</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><code>&lt;head&gt;</code></td>
<td>Specifies information about the document</td>
<td></td>
</tr>
<tr>
<td><code>&lt;header&gt;</code></td>
<td>Specifies a header for a document or section</td>
<td></td>
</tr>
<tr>
<td><code>&lt;hr&gt;</code></td>
<td>Specifies a horizontal rule</td>
<td></td>
</tr>
<tr>
<td><code>&lt;html&gt;</code></td>
<td>Specifies an html document</td>
<td></td>
</tr>
<tr>
<td><code>&lt;i&gt;</code></td>
<td>Specifies italic text</td>
<td></td>
</tr>
<tr>
<td><code>&lt;iframe&gt;</code></td>
<td>Specifies an inline sub window (frame)</td>
<td></td>
</tr>
<tr>
<td><code>&lt;ilayer&gt;</code></td>
<td>Specifies an inline layer</td>
<td></td>
</tr>
<tr>
<td><code>&lt;img&gt;</code></td>
<td>Specifies an image</td>
<td></td>
</tr>
<tr>
<td><code>&lt;input&gt;</code></td>
<td>Specifies an input field</td>
<td></td>
</tr>
<tr>
<td><code>&lt;ins&gt;</code></td>
<td>Specifies inserted text</td>
<td></td>
</tr>
<tr>
<td><code>&lt;isindex&gt;</code></td>
<td>Deprecated. Specifies a single-line input field</td>
<td></td>
</tr>
<tr>
<td><code>&lt;kbd&gt;</code></td>
<td>Specifies keyboard text</td>
<td></td>
</tr>
<tr>
<td><code>&lt;keygen&gt;</code></td>
<td>Generate key information in a form</td>
<td></td>
</tr>
<tr>
<td><code>&lt;label&gt;</code></td>
<td>Specifies a label for a form control</td>
<td></td>
</tr>
<tr>
<td><code>&lt;layer&gt;</code></td>
<td>Specifies a layer</td>
<td></td>
</tr>
<tr>
<td><code>&lt;legend&gt;</code></td>
<td>Specifies a title in a fieldset</td>
<td></td>
</tr>
<tr>
<td><code>&lt;li&gt;</code></td>
<td>Specifies a list item</td>
<td></td>
</tr>
<tr>
<td><code>&lt;link&gt;</code></td>
<td>Specifies a resource reference</td>
<td></td>
</tr>
<tr>
<td>Tag</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td><code>&lt;main&gt;</code></td>
<td>Specifies the main or important content in the document. There is only one element in the document</td>
<td></td>
</tr>
<tr>
<td><code>&lt;map&gt;</code></td>
<td>Specifies an image map</td>
<td></td>
</tr>
<tr>
<td><code>&lt;mark&gt;</code></td>
<td>Specifies a text highlighted for reference purposes, that is for its relevance in another context</td>
<td></td>
</tr>
<tr>
<td><code>&lt;marquee&gt;</code></td>
<td>Creates a scrolling-text marquee</td>
<td></td>
</tr>
<tr>
<td><code>&lt;menu&gt;</code></td>
<td>Deprecated. Specifies a menu list</td>
<td></td>
</tr>
<tr>
<td><code>&lt;menuitem&gt;</code></td>
<td>Specifies a command/menu item that the user can invoke from a popup menu</td>
<td></td>
</tr>
<tr>
<td><code>&lt;meta&gt;</code></td>
<td>Specifies meta data of an html document which is not displayed on the page</td>
<td></td>
</tr>
<tr>
<td><code>&lt;meter&gt;</code></td>
<td>Specifies a scalar measurement within a known range (a gauge)</td>
<td></td>
</tr>
<tr>
<td><code>&lt;multicol&gt;</code></td>
<td>Specifies a multicolumn text flow</td>
<td></td>
</tr>
<tr>
<td><code>&lt;nav&gt;</code></td>
<td>Specifies a section that contains only navigation links</td>
<td></td>
</tr>
<tr>
<td><code>&lt;nobr&gt;</code></td>
<td>No breaks allowed in the enclosed text</td>
<td></td>
</tr>
<tr>
<td><code>&lt;noembed&gt;</code></td>
<td>Specifies content to be presented by browsers that do not support the <code>&lt;embed&gt;</code> tag</td>
<td></td>
</tr>
<tr>
<td><code>&lt;noframes&gt;</code></td>
<td>Specifies a noframe section</td>
<td></td>
</tr>
<tr>
<td><code>&lt;noscript&gt;</code></td>
<td>Specifies a noscript section</td>
<td></td>
</tr>
<tr>
<td><code>&lt;object&gt;</code></td>
<td>Specifies an embedded object</td>
<td></td>
</tr>
<tr>
<td><code>&lt;ol&gt;</code></td>
<td>Specifies an ordered list</td>
<td></td>
</tr>
<tr>
<td>Tag</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>&lt;optgroup&gt;</td>
<td>Specifies an option group</td>
<td></td>
</tr>
<tr>
<td>&lt;option&gt;</td>
<td>Specifies an option in a drop-down list</td>
<td></td>
</tr>
<tr>
<td>&lt;output&gt;</td>
<td>Specifies the result of a calculation</td>
<td></td>
</tr>
<tr>
<td>&lt;p&gt;</td>
<td>Specifies a paragraph</td>
<td></td>
</tr>
<tr>
<td>&lt;param&gt;</td>
<td>Specifies a parameter for an object</td>
<td></td>
</tr>
<tr>
<td>&lt;plaintext&gt;</td>
<td>Deprecated. Render the remainder of the document as preformatted plain text</td>
<td></td>
</tr>
<tr>
<td>&lt;pre&gt;</td>
<td>Specifies preformatted text</td>
<td></td>
</tr>
<tr>
<td>&lt;progress&gt;</td>
<td>Specifies a completion progress of a task</td>
<td></td>
</tr>
<tr>
<td>&lt;q&gt;</td>
<td>Specifies a short quotation</td>
<td></td>
</tr>
<tr>
<td>&lt;rp&gt;</td>
<td>Specifies to show browsers that do not support the ruby element</td>
<td></td>
</tr>
<tr>
<td>&lt;rt&gt;</td>
<td>Specifies an text ruby annotation</td>
<td></td>
</tr>
<tr>
<td>&lt;ruby&gt;</td>
<td>Specifies an ruby annotation</td>
<td></td>
</tr>
<tr>
<td>&lt;s&gt;</td>
<td>Deprecated. Specifies strikethrough text</td>
<td></td>
</tr>
<tr>
<td>&lt;samp&gt;</td>
<td>Specifies sample computer code</td>
<td></td>
</tr>
<tr>
<td>&lt;script&gt;</td>
<td>Specifies a script</td>
<td></td>
</tr>
<tr>
<td>&lt;section&gt;</td>
<td>Specifies a section in a document</td>
<td></td>
</tr>
<tr>
<td>&lt;select&gt;</td>
<td>Specifies a selectable list</td>
<td></td>
</tr>
<tr>
<td>&lt;spacer&gt;</td>
<td>Specifies a white space</td>
<td></td>
</tr>
<tr>
<td>&lt;small&gt;</td>
<td>Specifies small text</td>
<td></td>
</tr>
<tr>
<td>HTML</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td><code>&lt;source&gt;</code></td>
<td>Specifies a media resources for media elements, defined inside video or audio elements</td>
<td></td>
</tr>
<tr>
<td><code>&lt;span&gt;</code></td>
<td>Specifies a section in a document</td>
<td></td>
</tr>
<tr>
<td><code>&lt;strike&gt;</code></td>
<td>Deprecated. Specifies strikethrough text</td>
<td></td>
</tr>
<tr>
<td><code>&lt;strong&gt;</code></td>
<td>Specifies strong text</td>
<td></td>
</tr>
<tr>
<td><code>&lt;style&gt;</code></td>
<td>Specifies a style definition</td>
<td></td>
</tr>
<tr>
<td><code>&lt;sub&gt;</code></td>
<td>Specifies subscripted text</td>
<td></td>
</tr>
<tr>
<td><code>&lt;summary&gt;</code></td>
<td>Specifies a summary, caption, or legend for a given <code>&lt;details&gt;</code></td>
<td></td>
</tr>
<tr>
<td><code>&lt;sup&gt;</code></td>
<td>Specifies superscripted text</td>
<td></td>
</tr>
<tr>
<td><code>&lt;table&gt;</code></td>
<td>Specifies a table</td>
<td></td>
</tr>
<tr>
<td><code>&lt;tbody&gt;</code></td>
<td>Specifies a table body</td>
<td></td>
</tr>
<tr>
<td><code>&lt;td&gt;</code></td>
<td>Specifies a table cell</td>
<td></td>
</tr>
<tr>
<td><code>&lt;textarea&gt;</code></td>
<td>Specifies a text area</td>
<td></td>
</tr>
<tr>
<td><code>&lt;tfoot&gt;</code></td>
<td>Specifies a table footer</td>
<td></td>
</tr>
<tr>
<td><code>&lt;th&gt;</code></td>
<td>Specifies a table heading</td>
<td></td>
</tr>
<tr>
<td><code>&lt;thead&gt;</code></td>
<td>Specifies a table header</td>
<td></td>
</tr>
<tr>
<td><code>&lt;time&gt;</code></td>
<td>Specifies a date and time <code>&lt;details&gt;</code></td>
<td></td>
</tr>
<tr>
<td><code>&lt;title&gt;</code></td>
<td>Specifies the document title</td>
<td></td>
</tr>
<tr>
<td><code>&lt;tr&gt;</code></td>
<td>Specifies a table row</td>
<td></td>
</tr>
</tbody>
</table>
### HTML `<track>` and `<!------>` Tag

**Description**

The HTML `<comment>` tag allows authors to comment their HTML code. This tag is supported by IE only.

It is recommended to use `<!--------->` to comment your tags. This tag is compatible to all browsers.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML <!------> Tag</title>
</head>
<body>

<comment>This is a commented line in IE</comment>

<!-- This is a commented line supported by almost every browser. It will not appear in output as its a comment. -->

</body>
</html>
```
This will produce the following result:

This is a commented line in IE

### Browser Support

#### Browser Support for `<comment>` tag

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Supported</td>
<td>Not Supported</td>
<td>Yes</td>
<td>Not Supported</td>
<td>Not Supported</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>

#### Browser Support for `<!----->` tag

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### HTML `<doctype>` Tag

#### Description

The HTML `<doctype>` tag is used for specifying which version of HTML the document is using. This is referred to as the document type declaration (DTD).

**NOTE:** The `<!DOCTYPE>` tag does not have an end tag!

#### Example

```
<!DOCTYPE html>
<html>
<head>
    <title>HTML doctype Tag</title>
</head>
<body>
    <p>doctype declaration `<doctype>` is mentioned at the starting of every HTML document.</p>
</body>
```
doctype declaration <doctype> is mentioned at the starting of every HTML document.

**Declaration**

HTML 4.01 has 3 possible doctypes: HTML 4 Strict, HTML 4 Transitional, and HTML 4 Frameset. Every HTML document you create should have one of these three DTDs.

**HTML 4 Strict**

This document type includes all HTML elements except those that have been deprecated, and those that appear in frameset documents.

```html
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN"
"http://www.w3.org/TR/html4/strict.dtd">
```

**HTML 4 Transitional**

This document type includes all HTML elements including those that have been deprecated.

```html
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
```

**HTML 4 Frameset**

This document type includes all HTML elements in the transitional DTD as well as those in framed document.

```html
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN"
"http://www.w3.org/TR/html4/frameset.dtd">
```

**HTML 5 Declaration**

In HTML5 there is only one declaration i.e.

```html
<!DOCTYPE html>
```

**Browser Support**

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
**HTML <a> Tag**

**Description**
The HTML `<a>` tag is used for creating a hyperlink to either another document, or somewhere within the current document.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML a Tag</title>
</head>
<body>
<p>This is a link to <a href="http://www.amrood.com">AMROOD.com</a></p>
</body>
</html>
```

This will produce the following result:

This is a link to AMROOD.com

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Specific Attributes**

The HTML `<a>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>charset</td>
<td>character_encoding</td>
<td>Defines the character encoding of the linked document.</td>
</tr>
<tr>
<td>coords</td>
<td>if shape=&quot;rect&quot; coords=&quot;left,top,right,bottom&quot; if shape=&quot;circ&quot; coords=&quot;centerx,centery,radius&quot; shape=&quot;poly&quot; coords=&quot;x1,y1,x2,y2,,xn,yn&quot; then then then</td>
<td>Specifies the coordinates appropriate to the shape attribute to define a region of an</td>
</tr>
<tr>
<td>Tag</td>
<td>Attribute</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>--------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>download</td>
<td>filename</td>
<td>This downloads the target when user clicks on the hyperlink.</td>
</tr>
<tr>
<td>href</td>
<td>URL</td>
<td>Specifies the URL of a page or the name of the anchor that the link goes to.</td>
</tr>
<tr>
<td>hreflang</td>
<td>language_code</td>
<td>Language code of the destination URL.</td>
</tr>
<tr>
<td>media</td>
<td>media_query</td>
<td>It specifies what media the linked document is optimized for.</td>
</tr>
<tr>
<td>name</td>
<td>section name</td>
<td>Marks an area of the page that a link jumps to.</td>
</tr>
<tr>
<td>rel</td>
<td>alternate</td>
<td>Describes the relationship between the current document and the destination URI.</td>
</tr>
<tr>
<td></td>
<td>designates</td>
<td>Start next prev contents index glossary copyright chapter section subsection appendix help bookmark</td>
</tr>
<tr>
<td></td>
<td>stylesheet</td>
<td></td>
</tr>
<tr>
<td>rev</td>
<td>alternate</td>
<td>Specifies the relationship between the target URL and the current document.</td>
</tr>
<tr>
<td></td>
<td>designates</td>
<td></td>
</tr>
<tr>
<td></td>
<td>stylesheet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>prev contents index glossary copyright chapter section subsection appendix help bookmark</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>shape</strong></td>
<td>rect, circ, circle, poly, polygon</td>
<td></td>
</tr>
<tr>
<td><strong>target</strong></td>
<td>_blank, _self, _top</td>
<td></td>
</tr>
<tr>
<td><strong>type</strong></td>
<td>mime_type</td>
<td></td>
</tr>
</tbody>
</table>

**shape** Specifies the shape of the image map

**target** Where to open the target URL:

- _blank - the target URL will open in a new window
- _self - the target URL will open in the same frame as it was clicked
- _parent - the target URL will open in the parent frameset
- _top - the target URL will open in the full body of the window

**type** Specifies the MIME (Multipurpose Internet Mail Extensions) type of the target URL

---

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#)
HTML <abbr> Tag

Description
The HTML `<abbr>` tag is used for indicating an abbreviation like etc., pvt.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML abbr Tag</title>
</head>
<body>
<p>
<abbr title="Private">pvt.</abbr><br />
<abbr title="International Cricket Council">ICC.</abbr> promotes the global game.<br />
</p>
</body>
</html>
```

This will produce the following result:

pvt.
ICC promotes the global game.

Global Attributes
This tag supports all the global attributes described in - [HTML Attribute Reference](#)

Event Attributes
This tag supports all the event attributes described in - [HTML Events Reference](#)
## Browser Support

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

## HTML `<acronym>` Tag

### Description

The HTML `<acronym>` tag is used for indicating an acronym.

### Example

```html
<!DOCTYPE html>
<html>
<head>
    <title>HTML acronym Tag</title>
</head>
<body>
    <p>
        <acronym title="HyperText Markup Language">HTML</acronym>
    </p>
</body>
</html>
```

This will produce the following result:

HTML

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)
Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>

HTML <address> Tag

Description
The HTML <address> tag is used for indicating an address. The address usually renders in italic.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML address Tag</title>
</head>
<body>
<address>
600 Wisdon Apartments<br/>
Filmcity, Kondiura<br/>
New Delhi - 50027
</address>
</body>
</html>
```

This will produce the following result:

600 Wisdon Apartments
Filmcity, Kondiura
New Delhi - 50027

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Event Attributes
This tag supports all the event attributes described in - HTML Events Reference
Browser Support

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML `<applet>` Tag

Description
The HTML `<applet>` tag specifies an applet. It is used for embedding a Java applet within an HTML document. It is not supported in HTML5.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML applet Tag</title>
</head>
<body>
<applet code="newClass.class" width="300" height="200">
</applet>
</body>
</html>
```

Here is the `newClass.java` file:

```java
import java.applet.*;
import java.awt.*;

public class newClass extends Applet
{
    public void paint (Graphics gh)
    {
        g.drawString("Tutorialspoint.com", 300, 150);
    }
}
```
This will produce the following result:

TutorialsPoint.com

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Specific Attributes**

The HTML `<>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>align</td>
<td>URL</td>
<td><em>Deprecated</em> - Defines the text alignment around the applet</td>
</tr>
<tr>
<td>alt</td>
<td>URL</td>
<td>Alternate text to be displayed in case browser does not support applet</td>
</tr>
<tr>
<td>archive</td>
<td>URL</td>
<td>Applet path when it is stored in a Java Archive ie. jar file</td>
</tr>
<tr>
<td>code</td>
<td>URL</td>
<td>A URL that points to the class of the applet</td>
</tr>
<tr>
<td>codebase</td>
<td>URL</td>
<td>Indicates the base URL of the applet if the code attribute is relative</td>
</tr>
<tr>
<td>height</td>
<td>pixels</td>
<td>Height to display the applet</td>
</tr>
<tr>
<td>hspace</td>
<td>pixels</td>
<td><em>Deprecated</em> - Defines the left and right spacing around the applet</td>
</tr>
<tr>
<td>name</td>
<td>name</td>
<td>Defines a unique name for the applet</td>
</tr>
<tr>
<td>object</td>
<td>name</td>
<td>Specifies the resource that contains a serialized representation of the applet's state.</td>
</tr>
</tbody>
</table>
### HTML <area> Tag

**Description**
The HTML <area> tag is used for defining an area in an image map.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML area Tag</title>
</head>
<body>
<img src=/images/usemap.gif alt="usemap" border="0"
    usemap="#tutorials"/>
<map name="tutorials">
    <area shape="poly"
        coords="74,0,113,29,98,72,52,72,38,27"
        href="/perl/index.htm"
        alt="Perl Tutorial"
        target="_blank" />
</map>
</body>
</html>
```
This will produce the following result:

```
<area shape="rect"
     coords="22,83,126,125"
     alt="HTML Tutorial"
     href="/html/index.htm"
     target="_blank" />
<area shape="circle"
     coords="73,168,32"
     alt="PHP Tutorial"
     href="/php/index.htm"
     target="_blank" />
```

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Specific Attributes**

The HTML `<area>` tag also supports the following additional attributes:
<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>alt</td>
<td>text</td>
<td>Specifies an alternate text for the area.</td>
</tr>
<tr>
<td>coords</td>
<td>if shape=&quot;rect&quot; then coords=&quot;left,top,right,bottom&quot; if shape=&quot;circ&quot; then coords=&quot;centerx,centery,radius&quot; if shape=&quot;poly&quot; then coords=&quot;x1,y1,x2,y2,...,xn,yn&quot;</td>
<td>Specifies the coordinates appropriate to the shape attribute to define a region of an image for image maps.</td>
</tr>
<tr>
<td>download</td>
<td>filename</td>
<td>Specifies that the target gets downloaded when hyperlink is clicked by user.</td>
</tr>
<tr>
<td>href</td>
<td>URL</td>
<td>Specifies the URL of a page or the name of the anchor that the link goes to.</td>
</tr>
<tr>
<td>hreflang</td>
<td>language_code</td>
<td>Specifies the language of the target URL.</td>
</tr>
<tr>
<td>media</td>
<td>media query</td>
<td>Specifies media/device the target URL is optimized for.</td>
</tr>
<tr>
<td>nohref</td>
<td>true/false</td>
<td>Excludes an area from the image map</td>
</tr>
<tr>
<td>rel</td>
<td>alternate author bookmark help license next nofollow noreferer prefetch prev search tag</td>
<td>Specifies relationship between the current document and the target URL</td>
</tr>
<tr>
<td>shape</td>
<td>rect rectangle circ circle</td>
<td>Specifies the shape of the image map</td>
</tr>
<tr>
<td>Event Attributes</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td><strong>target</strong></td>
<td>Specifies where to open the target URL.</td>
<td></td>
</tr>
<tr>
<td><em>blank</em></td>
<td>- the target URL will open in a new window</td>
<td></td>
</tr>
<tr>
<td><em>parent</em></td>
<td>- the target URL will open in the same frame as it was clicked</td>
<td></td>
</tr>
<tr>
<td><em>self</em></td>
<td>- the target URL will open in the parent frameset</td>
<td></td>
</tr>
<tr>
<td><em>top</em></td>
<td>- the target URL will open in the full body of the window</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>type</strong></th>
<th>mime_type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifies the MIME (Multipurpose Internet Mail Extensions) type of the target URL.</td>
<td></td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#).

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML <article> Tag**

**Description**

The HTML <article> tag is used in a blog post, forum post, newspaper article etc. It specifies self-contained composition in a site, document, page or application.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Article Tag</title>
</head>
<body>
</body>
</html>
```
<article>
<h2>PHP</h2>
<p>PHP is PHP Hypertext Preprocessor.</p>
</article>

This will produce the following result:

**PHP**

PHP is PHP Hypertext Preprocessor.

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

### Browser Support

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### HTML <aside> Tag

**Description**

The HTML <aside> tag is used to specify a section of a page aside from the related section. This tag can be used for glossary definitions, author biography, author profile etc.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML aside Tag</title>
</head>
<body>
</body>
</html>
```
Java History
Java is a programming language developed by James Gosling in 1994.

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Event Attributes
This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML <audio> Tag

Description
The HTML <audio> tag is used to embed audio in web pages.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML audio Tag</title>
</head>
<body>
</body>
</html>
```
<p>Click on Play button...</p>
(Song: Kalimba which is provided as a Sample Music in Windows)

This will produce the following result:

**Click on Play button...**
(Song: Kalimba which is provided as a Sample Music in Windows)

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Mobile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### HTML <b> Tag

**Description**
The HTML <b> tag specifies bold text.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML b Tag</title>
</head>
<body>
This web page gives explanation on <b>bold</b> tag.
</body>
</html>
```
This will produce the following result:

This web page gives explanation on **bold** tag.

**Global Attributes**
This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Event Attributes**
This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML `<base>` Tag**

**Description**
The HTML `<base>` tag is used to specify a base URI, or URL, for relative links.

For example, you can set the base URL once at the top of your page in header section, then all subsequent relative links will use that URL as a starting point.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
  <title>HTML base Tag</title>
  <base href="http://www.tutorialspoint.com"/>
</head>
<body>
  HTML: <img src="/images/html.gif"/>
</body>
</html>
```

This will produce the following result:
Global Attributes

This tag supports all the global attributes described in - HTML Attribute Reference

Specific Attributes

The HTML <base> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>href</td>
<td>URL</td>
<td>Specifies the URL of a page or the name of the anchor that the link goes to.</td>
</tr>
<tr>
<td>target</td>
<td>_blank _parent _self _top</td>
<td>Where to open the target URL. _blank - the target URL will open in a new window. _self - the target URL will open in the same frame as it was clicked. _parent - the target URL will open in the parent frameset. _top - the target URL will open in the full body of the window</td>
</tr>
</tbody>
</table>

Event Attributes

This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML <basefont> Tag

Description
The HTML `<basefont>` tag is used to specify a base font for the document to use. This base font is applied to complete document. This tag is depreciated now.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML basefont Tag</title>
</head>
<body>
<basefont face="cursive,serif" color="#ff9900" size="4"/>
<p>The HTML basefont tag is now deprecated. You should use CSS font to set font properties instead.</p>
</body>
</html>
```

This will produce the following result:

The HTML basefont tag is now deprecated. You should use CSS font to set font properties instead.

This result may vary browser to browser.

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#).

**Specific Attributes**

The HTML `<basefont>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>color</td>
<td>rgb(x,x,x) #xxxxxx colorme</td>
<td>Deprecated - Specifies the color of the text.</td>
</tr>
<tr>
<td>face</td>
<td>font names separated by comma</td>
<td>Deprecated - Specifies the font family of the text.</td>
</tr>
<tr>
<td>size</td>
<td>1 to 7</td>
<td>Deprecated - Specifies the font size of the text.</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#).
## Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Supported</td>
<td>Not Supported</td>
<td>Yes</td>
<td>Not Supported</td>
<td>Not Supported</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>

## HTML <bdo> Tag

### Description

The HTML `<bdo>` tag is used to override the default text direction.

### Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML bdo Tag</title>
</head>
<body>
<bdo dir="rtl">Here's some English embedded in text in another language requiring a right-to-left presentation.</bdo>
</body>
</html>
```

This will produce the following result:

```
tfel-ot-thgir a gniriuqp' egaugnal rehtona ni txet ni deddebmE hsielnE emos s'ereH .notatneserp
```

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#).

### Specific Attributes

The HTML `<bdo>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
</table>

**dir** | ltr|rtl | Defines the text direction.

| Event Attributes | This tag supports all the event attributes described in - [HTML Events Reference](#) |

<table>
<thead>
<tr>
<th>Browser Support</th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML `<bdi>` Tag**

**Description**

The HTML `<bdi>` tag is Bi-directional isolation element which is used to embed text with a different direction from another text.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML bdi Tag</title>
</head>
<body>
<p>Tutorialspoint list of tutorials:</p>
<ul>
<li>Web: HTML</li>
<li>Programming: <bdi>Java</bdi></li>
<li>Scripting: <bdi>VBScript</bdi></li>
<li>Mobile: <bdi>Android</bdi></li>
</ul>
</body>
</html>
```
This will produce the following result:

Tutorials point list of tutorials:

- Web: HTML
- Programming: Java
- Scripting: VBScript
- Mobile: Android

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Not Supported</td>
<td>Not Supported</td>
<td>Not Supported</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>

**HTML `<bgsound>` Tag**

**Description**

The HTML `<bgsound>` tag is used to play a soundtrack in the background. This tag is for Internet Explorer only.

**Example**

```html
<html>
<head>
<title>HTML bgsound Tag</title>
</head>
<body>
<bgsound src="/html/yourfile.mdi"/>
<p>This does create any result on the screen but it plays sound file in the background.</p>
</body>
</html>
```

This will produce the following result:
This does create any result on the screen but it plays sound file in the background.

**Specific Attributes**
The HTML `<bgsound>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>loop</td>
<td>number</td>
<td>Lets you replay a background soundtrack a certain number of times.</td>
</tr>
<tr>
<td>src</td>
<td>URL</td>
<td>Specifies the path of the sound file.</td>
</tr>
</tbody>
</table>

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**HTML `<big>` Tag**

**Description**
The HTML `<big>` tag increases the font size. *This tag is not supported in HTML5.*

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML big Tag</title>
</head>
<body>
<p><big>Website: complyonline.com</big>(Online Compiler)</p>
</body>
</html>
```

This will produce the following result:

Website: complyonline.com (Online Compiler)
Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Browser Support

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML blink Tag

Description
The HTML <blink> tag is used to enclose a text to make it blink. This tag was supported by Netscape and now this is obsolete.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML blink Tag</title>
</head>
<body>
<blink>This text will blink in Netscape Version 5.0</blink>
</body>
</html>
```

This will produce the following result:
This text will blink in Netscape Version 5.0

Browser Support

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not Supported</td>
<td>Not Supported</td>
<td>Not Supported</td>
<td>Not Supported</td>
<td>Not Supported</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>
HTML <blockquote> Tag

Description
The HTML <blockquote> tag is used for indicating long quotations (i.e. quotations that span multiple lines). It should contain only block-level elements within it, and not just plain text.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML blockquote Tag</title>
</head>
<body>
<blockquote>
Browsers generally render blockquote text as indented text. If your quoted text needs to display within a non-quoted paragraph, you should use the HTML q tag. Most browsers surround q text with quotation marks.
</blockquote>

&q>Browsers generally render blockquote text as indented text. If your quoted text needs to display within a non-quoted paragraph, you should use the HTML q tag. Most browsers surround q text with quotation marks.</q>
</body>
</html>
```

This will produce the following result:

Browsers generally render blockquote text as indented text. If your quoted text needs to display within a non-quoted paragraph, you should use the HTML q tag. Most browsers surround q text with quotation marks.

“Browsers generally render blockquote text as indented text. If your quoted text needs to display within a non-quoted paragraph, you should use the HTML q tag. Most browsers surround q text with quotation marks”

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Specific Attributes
The HTML <blockquote> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>cite</td>
<td>URL</td>
<td>URL of the quote, if it is taken from the web.</td>
</tr>
</tbody>
</table>
Event Attributes
This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML <body> Tag

Description
The HTML <body> tag is used for indicating the main content section of the HTML document.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML body Tag</title>
</head>
<body>
Body of the document...
</body>
</html>
```

This will produce the following result:

Body of the document...

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference
**Specific Attributes**

The HTML `<body>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>alink</td>
<td>rgb(x,x,x) #xxxxxx colorname</td>
<td>Deprecated - Specifies the color of the active links in the document.</td>
</tr>
<tr>
<td>background</td>
<td>URL</td>
<td>Deprecated - Specifies the background image file path.</td>
</tr>
<tr>
<td>bgcolor</td>
<td>rgb(x,x,x) #xxxxxx colorname</td>
<td>Deprecated - Specifies the background color.</td>
</tr>
<tr>
<td>link</td>
<td>rgb(x,x,x) #xxxxxx colorname</td>
<td>Deprecated - Specifies the color of all the links in the document.</td>
</tr>
<tr>
<td>text</td>
<td>rgb(x,x,x) #xxxxxx colorname</td>
<td>Deprecated - Specifies the color of the text in the document.</td>
</tr>
<tr>
<td>vlink</td>
<td>rgb(x,x,x) #xxxxxx colorname</td>
<td>Deprecated - Specifies the color of the visited links in the document.</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#).

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML `<br>` Tag**

**Description**

The HTML `<br>` tag is used to give a line break.
Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML br Tag</title>
</head>
<body>
<p>This is before the line break<br />
and this after the line break.</p>
</body>
</html>
```

This will produce the following result:

This is before the line break
and this after the line break.

Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML Button Tag

Description

The HTML `<button>` tag is used for creating a button within HTML form. You can also use `<input>` tag to create similar buttons.

Example

```html
<!DOCTYPE html>
<html>
<head>
</head>
```
This will produce the following result:

Top of Form

Click Me

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Specific Attributes**

The HTML `<button>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>autofocus</td>
<td>autofocus</td>
<td>Specifies that the button should have input focus when the page loads.</td>
</tr>
<tr>
<td>disabled</td>
<td>disabled</td>
<td>Specifies the button is disabled.</td>
</tr>
<tr>
<td>form</td>
<td>form_id</td>
<td>Specifies the forms to which button belongs.</td>
</tr>
<tr>
<td>formaction</td>
<td>URL</td>
<td>Specifies the link where the form submits.</td>
</tr>
<tr>
<td>formenctype</td>
<td>application multipart/form-data text/plain</td>
<td>Specifies how the form data is encoded before sending it to server.</td>
</tr>
<tr>
<td>formmethod</td>
<td>get post</td>
<td>Specifies how to send form data.</td>
</tr>
<tr>
<td>formnovalidate</td>
<td>formnovalidate</td>
<td>Specifies that the form data should not be validated.</td>
</tr>
<tr>
<td>formtarget</td>
<td>_blank</td>
<td>_self</td>
</tr>
<tr>
<td>------------</td>
<td>--------</td>
<td>-------</td>
</tr>
<tr>
<td>name</td>
<td>name</td>
<td>Specifies the button name.</td>
</tr>
<tr>
<td>type</td>
<td>button</td>
<td>reset</td>
</tr>
<tr>
<td>value</td>
<td>text</td>
<td>Specifies button's initial value.</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#).

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML <canvas> Tag**

**Description**

The HTML <canvas> tag is for drawing graphics, animations etc using scripting.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Canvas Tag</title>
</head>
<body>
<canvas id="newCanvas">Your browser does not support canvas tag.</canvas>
<script>
var c=document.getElementById('newCanvas');
var ctx=c.getContext('2d');
```
This will produce the following result:

**Global Attributes**
This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Specific Attributes**
The HTML `<canvas>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>height</td>
<td>pixels</td>
<td>Specifies height of the canvas.</td>
</tr>
<tr>
<td>width</td>
<td>pixels</td>
<td>Specifies width of the canvas.</td>
</tr>
</tbody>
</table>

**Event Attributes**
This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>?</td>
</tr>
</tbody>
</table>

**HTML `<caption>` Tag**

**Description**
The HTML `<caption>` tag is used for creating a caption for a table. There could be only one caption per table.

**Example**

```html
<!DOCTYPE html>
<html>
```
<head>
<title>HTML caption Tag</title>
</head>
<body>
<h2>Cricketers List</h2>
<table width="100%">
  <caption>Indian Cricketers</caption>
  <th>Name</th>
  <tr><td>Sachin Tendulkar</td></tr>
  <tr><td>M S Dhoni</td></tr>
  <tr><td>Suresh Raina</td></tr>
  <tr><td>Virat Kohli</td></tr>
</table>
</body>
</html>

This will produce the following result:

**Cricketers List**

Indian Cricketers

<table>
<thead>
<tr>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sachin Tendulkar</td>
</tr>
<tr>
<td>M S Dhoni</td>
</tr>
<tr>
<td>Suresh Raina</td>
</tr>
<tr>
<td>Virat Kohli</td>
</tr>
</tbody>
</table>

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
**HTML <center> Tag**

**Description**
The HTML `<center>` tag is used for centering the content enclosed with this tag. *This tag is depreciated.*

**Example**
```html
<!DOCTYPE html>
<html>
<head>
<title>HTML center Tag</title>
</head>
<body>
<center>This text is centered</center>
</body>
</html>
```

This will produce the following result:

This text is centered

**Global Attributes**
This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Event Attributes**
This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>?</td>
</tr>
</tbody>
</table>

**HTML <cite> Tag**

**Description**
The HTML `<cite>` tag specifies a citation. It can be defined as title of a work.
Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML cite Tag</title>
</head>
<body>
<p>The learning content can be referred from <cite>Data Structures & Algorithms in Java</cite></p>
</body>
</html>
```

This will produce the following result:

The learning content can be referred from *Data Structures & Algorithms in Java*

Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

Browser Support

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML `<code>` Tag

Description

The HTML `<code>` tag specifies computer code text.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML code Tag</title>
</head>
```
The header file for C++ Program is:

```cpp
#include<iostream.h>
```

This will produce the following result:

The header file for C++ Program is:

```cpp
#include<iostream.h>
```

**Global Attributes**

This tag supports all the global attributes described in [HTML Attribute Reference](#).

**Event Attributes**

This tag supports all the event attributes described in [HTML Events Reference](#).

**Browser Support**

<table>
<thead>
<tr>
<th>Browser</th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML `<col>` Tag**

**Description**

The HTML `<col>` tag allows authors to group together attribute specifications for table columns. It does not group columns together structurally -- that is the role of the element.

The elements are empty and serve only as a support for attributes.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML col Tag</title>
</head>
<body>
<p>This example shows a colgroup that has three columns of different widths:</p>
<table border="1">
<colgroup span="3">
```

This will produce the following result:

This example shows a colgroup that has three columns of different widths:

```
col 1   col 2   col 3   col 4
```

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#).

**Specific Attributes**

The HTML `<col>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>align</td>
<td>right left center justify char</td>
<td>Defines horizontal alignment, <em>not supported in Html5.</em></td>
</tr>
<tr>
<td>char</td>
<td>character</td>
<td>Defines a character to use to align text on (use with align=&quot;char&quot;), <em>not supported in Html5.</em></td>
</tr>
<tr>
<td>charoff</td>
<td>pixel</td>
<td>Specifies an alignment offset (either in pixels or percentage value) against the first character as specified with the char attribute, <em>not supported in Html5.</em></td>
</tr>
</tbody>
</table>
span | number | Defines the number of columns the `<col>` should span, *not supported in Html5*.
--- | --- | ---
valign | bottom middle top baseline | Defines vertical alignment, *not supported in Html5*.
width | pixels or % | Specifies a default width for each column spanned by the current col element, *not supported in Html5*.

**Event Attributes**
This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>?</td>
</tr>
</tbody>
</table>

**HTML colgroup Tag**

**Description**
The HTML `<colgroup>` tag is used for specifying properties for a group of columns within a table.

If you need to apply different properties to a column within a colgroup, you can use the HTML col tag within the colgroup tag.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML colgroup Tag</title>
</head>
<body>
<p>This example shows a colgroup that has three columns of different widths:</p>
<table border="1">
```
This will produce the following result:

This example shows a colgroup that has three columns of different widths:

```
col 1  col 2  col 3
```

**Global Attributes**

This tag supports all the global attributes described in - HTML Attribute Reference

**Specific Attributes**

The HTML `<colgroup>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>align</td>
<td>right left center justify char</td>
<td>Defines horizontal alignment, <em>not supported in Html5</em>.</td>
</tr>
<tr>
<td>char</td>
<td>character</td>
<td>Defines a character to use to align text on (use with align=&quot;char&quot;), <em>not supported in Html5</em>.</td>
</tr>
<tr>
<td>charoff</td>
<td>pixel</td>
<td>Specifies an alignment offset (either in pixels or percentage value) against the first character as specified with the char attribute, <em>not supported in Html5</em>.</td>
</tr>
</tbody>
</table>
HTML

<table>
<thead>
<tr>
<th>span</th>
<th>number</th>
<th>Defines the number of columns the &lt;col&gt; should span, not supported in Html5.</th>
</tr>
</thead>
<tbody>
<tr>
<td>valign</td>
<td>bottom, middle, top or baseline</td>
<td>Defines vertical alignment, not supported in Html5.</td>
</tr>
<tr>
<td>width</td>
<td>pixels or %</td>
<td>Specifies a default width for each column spanned by the current col element, not supported in Html5.</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML <comment> and <!--.....--> Tag**

**Description**

The HTML <comment> tag allows authors to comment their HTML code. This tag is supported by IE only.

It is recommended to use <!--.....--> to comment your tags. This tag is compatible with all browsers.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML <comment> and <!--.....--> Tag</title>
</head>
<body>
<comment>This is a commented line in IE</comment>
<!-- This is a commented line supported by almost every browser. It will not appear in output as its a comment. -->
</body>
```
This will produce the following result:

**Browser Support**

Browser Support for `<comment>` tag

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not Supported</td>
<td>Not Supported</td>
<td>Yes</td>
<td>Not Supported</td>
<td>Not Supported</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>

Browser Support for `<!--....-->` tag

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML `<datalist>` Tag**

**Description**
The HTML `<datalist>` tag specifies set of options for `<input>` element.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Datalist Tag</title>
</head>
<body>
<input list="tutorials" />
<datalist id="tutorials">
    <option value="Java">
    <option value="ASP">
    <option value="PHP">
    <option value="Ruby">
    <option value="jQuery">
</datalist>
</body>
</html>
```
This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Event Attributes**
This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Not Supported</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML <dd> Tag**

**Description**
The HTML `<dd>` tag is used for specifying a definition description in a definition list.

A definition list is similar to other lists but in a definition list, each list item contains two entries; a term and a description.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML dd Tag</title>
</head>
<body>
<dl>
<dt>Definition List</dt>
<dd>A list of terms and their definitions/descriptions.</dd>
<dd>HTML</dd>
<dd>An HTML tutorial.</dd>
</dl>
</body>
</html>
```
This will produce the following result:

Definition List

A list of terms and their definitions/descriptions.

HTML

An HTML tutorial.

PHP

An PHP tutorial.

Global Attributes

This tag supports all the global attributes described in - HTML Attribute Reference

Event Attributes

This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML <del> Tag

Description

The HTML <del> tag is used for markup of deleted text.

Example

```html
<!DOCTYPE html>
<html>
</html>
```
Following text is deleted using <del>HTML del tag</del>

This will produce the following result:

Following text is deleted using HTML del tag

**Global Attributes**

This tag supports all the global attributes described in - HTML Attribute Reference

**Specific Attributes**

The HTML <del> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>cite</td>
<td>URL</td>
<td>Defines a URL to another document which explains why the text was deleted.</td>
</tr>
<tr>
<td>datetime</td>
<td>YYYYMMDD HH:MM:SS</td>
<td>Defines the date and time the text was deleted.</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - HTML Events Reference

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML <dfn> Tag**

**Description**

The HTML <dfn> tag specifies a definition term.
Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML dfn Tag</title>
</head>
<body>
<dl>
<dt>
<dfn>
<abbr title="Java Server Pages">JSP</abbr>
</dfn>
</dt>
<dd>JSP is used to create dynamically generated web pages.</dd>
</dl>
</body>
</html>
```

This will produce the following result:

`JSP`

JSP is used to create dynamically generated web pages.

Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#).

Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#).

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML `<dialog>` tag

Description
The HTML `<dialog>` tag is used for defining a dialog box.

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML dialog Tag</title>
</head>
<body>
<dialog open>this will be shown in a dialog</dialog>
</body>
</html>
```

This will produce the following result:

```
this will be shown in a dialog
```

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#).

**Specific Attributes**

The HTML `<dialog>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>open</td>
<td>open</td>
<td>opens a dialog box and user can interact with it</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#).

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (Canary)</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>6.0</td>
<td>No</td>
</tr>
</tbody>
</table>

**HTML `<dir>` Tag**

**Description**
The HTML `<dir>` tag is used for specifying a directory list. This is very similar to `<ul>` tag but now this is deprecated.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML dir Tag</title>
</head>
<body>
<dir>
<li>dir</li>
<li>menu</li>
<li>ul</li>
</dir>
</body>
</html>
```

This will produce the following result:

- dir
- menu
- ul

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#).

**Specific Attributes**

The HTML `<dir>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>compact</td>
<td>compact</td>
<td>Deprecated - Specifies a compact rendering.</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#).

**Browser Support**
### HTML div Tag

#### Description

The HTML `<div>` tag is used for defining a section of your document. With the div tag, you can group large sections of HTML elements together and format them with CSS.

The difference between the div tag and the span tag is that the div tag is used with block-level elements whilst the span tag is used with inline elements.

#### Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML div Tag</title>
<link rel="stylesheet" href="style2.css">
</head>
<body>
<div id="contentinfo">
<p>Welcome to our website. We provide tutorials on various subjects.</p>
</div>
</body>
</html>
```

Here is the css file `style2.css`

```css
#contentinfo p {
    line-height: 20px;
    margin: 30px;
    padding-bottom: 20px;
    text-align: justify;
    width: 140px;
    color: red;
}
```
This will produce the following result:

Welcome to our website. We provide tutorials on various subjects.

Global Attributes

This tag supports all the global attributes described in - HTML Attribute Reference

Specific Attributes

The HTML <div> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>autofocus</td>
<td>autofocus</td>
<td>Specifies</td>
</tr>
</tbody>
</table>

Event Attributes

This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML <dl> Tag

Description

The HTML <dl> tag is used for declaring a definition list. This tag is used within <dd> tag. A definition list is similar to other lists but in a definition list, each list item contains two entries; a term and a description.

Example
This will produce the following result:

Definition List

A list of terms and their definitions/descriptions.

HTML

An HTML tutorial.

PHP

An PHP tutorial.

Global Attributes

This tag supports all the global attributes described in - HTML Attribute Reference

Event Attributes

This tag supports all the event attributes described in - HTML Events Reference

Browser Support
**HTML <dt> Tag**

**Description**
The HTML `<dt>` tag is used to define the start of a term in a definition list.

A definition list is similar to other lists but in a definition list, each list item contains two entries; a term and a description.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML dt Tag</title>
</head>
<body>
<dl>
<dt>Definition List</dt>
<dd>A list of terms and their definitions/descriptions.</dd>
<dt>JAVA</dt>
<dd>Tutorial on JAVA Programming Language.</dd>
<dt>Android</dt>
<dd>Tutorial on Android Operating System.</dd>
</dl>
</body>
</html>
```

This will produce the following result:

Definition List

    A list of terms and their definitions/descriptions.

JAVA

    Tutorial on JAVA Programming Language.
Android

Tutorial on Android Operating System.

**Global Attributes**
This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Event Attributes**
This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML `<em>` Tag**

**Description**
The HTML `<em>` tag formats the text in a document. It specifies emphasized text.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML em Tag</title>
</head>
<body>
<p>Insert an image in a web page using <em>image</em> tag.</p>
</body>
</html>
```

This will produce the following result:

Insert an image in a web page using *image* tag.
This tag supports all the global attributes described in - HTML Attribute Reference

Event Attributes
This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML <embed> Tag

Description
The HTML <embed> tag represents a container for external application or interactive content.

Example

```html
<!DOCTYPE html>
<html>
<head>
  <title>HTML Embed Tag</title>
</head>
<body>
  <embed src="/html/yourfile.mid" width="250" height="100" />
</body>
</html>
```

This will produce the following result:

![Image of embedded content]

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

**Specific Attributes**

The HTML `<video>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>height</td>
<td>pixels</td>
<td>Specifies the height.</td>
</tr>
<tr>
<td>src</td>
<td>URL</td>
<td>Specifies the address of the source file.</td>
</tr>
<tr>
<td>type</td>
<td>MIME_type</td>
<td>Specifies the MIME type.</td>
</tr>
<tr>
<td>width</td>
<td>pixels</td>
<td>Specifies the width.</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - HTML Events Reference

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML `<fieldset>` Tag**

**Description**

The HTML `<fieldset>` tag is used for grouping related form elements. By using the fieldset tag and the legend tag, you can make your forms much easier to understand for your users.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
    <title>HTML fieldset Tag</title>
</head>
<body>
</body>
```
<form>
  <fieldset>
    <legend>Details</legend>
    Student Name: <input type="text"><br />
    MCA Subjects:<input type="text"><br />
    Course Link:<input type="url" name="websitelink">
  </fieldset>
</form>

This will produce the following result:

Details
Student Name: 
MCA Subjects: 
Course Link: 

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Specific Attributes
The HTML <fieldset> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>align</td>
<td>left top right center bottom</td>
<td>Deprecated - Specifies the content alignment.</td>
</tr>
<tr>
<td>disabled</td>
<td>disabled</td>
<td>Specifies that a group of related form elements should be disabled.</td>
</tr>
<tr>
<td>form</td>
<td>form_id</td>
<td>Specifies forms which belongs to fieldset.</td>
</tr>
<tr>
<td>name</td>
<td>text</td>
<td>Specifies a name for fieldset.</td>
</tr>
</tbody>
</table>
Event Attributes
This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML Figcaption Tag

Description
The HTML `<figcaption>` tag specifies a caption for an element.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Figcaption Tag</title>
</head>
<body>
<figure>
<img src="http://www.tutorialspoint.com/scripts/img/logo.png" />
<figcaption>Tutorials Point Logo</figcaption>
</figure>
</body>
</html>
```

This will produce the following result:

![Tutorials Point Logo](http://www.tutorialspoint.com/scripts/img/logo.png)

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Event Attributes
This tag supports all the event attributes described in - HTML Events Reference
HTML Figure Tag

Description
The HTML <figure> tag specifies self-contained content.

Example

```html
<!DOCTYPE html>
<html>
<head>
    <title>HTML Figure Tag</title>
</head>
<body>
    <h2>Tutorials Point Logo</h2>
    <figure><img src="http://www.tutorialspoint.com/scripts/img/logo.png"/>
    </figure>
</body>
</html>
```

This will produce the following result:

Tutorials Point Logo

Global Attributes
This tag supports all the global attributes described in - [HTML Attribute Reference](#)

Event Attributes
This tag supports all the event attributes described in - [HTML Events Reference](#)

Browser Support

<table>
<thead>
<tr>
<th>Browser</th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
**HTML <font> Tag**

**Description**

The HTML `<font>` tag is used to specify the font of the text. It is deprecated in HTML as well as in XHTML.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML font Tag</title>
</head>
<body>
<font face="cursive,serif" color="#ff9900" size="4">
The HTML font tag is now deprecated. You should use start using CSS to set font size and family.
</font>
</body>
</html>
```

This will produce the following result:

The HTML font tag is now deprecated. You should use start using CSS to set font size and family.

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Specific Attributes**

The HTML `<font>` tag also supports the following additional attributes:
### Attribute, Value, Description

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>color</td>
<td>rgb(x,x,x) #hexcode colormname</td>
<td>Deprecated - Specifies the color of the text.</td>
</tr>
<tr>
<td>face</td>
<td>List of font names</td>
<td>Deprecated - Specifies the font families.</td>
</tr>
<tr>
<td>size</td>
<td>number</td>
<td>Deprecated - Specifies the font size from 1 to 7.</td>
</tr>
</tbody>
</table>

#### Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#).

#### Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### HTML Footer Tag

#### Description

The HTML `<footer>` tag specifies a footer for a document or section.

#### Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Footer Tag</title>
</head>
<body>
<header>
<h1>Simply Easy Learning</h1>
<p>You’re visiting tutorialspoint.com - tutorial hub for simply easy learning.</p>
</header>
<footer>
© Copyright 2014, All Rights Reserved
</footer>
</body>
</html>
```
This will produce the following result:

**Simply Easy Learning**
You’re visiting tutorialspoint.com - tutorial hub for simply easy learning.

© Copyright 2014, All Rights Reserved

**Global Attributes**
This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Event Attributes**
This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th>Browser</th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML <form> Tag**

**Description**
The HTML `<form>` tag is used for creating a form for user input. A form can contain textfields, checkboxes, radio-buttons and more. Forms are used to pass user-data to a specified URL.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML form Tag</title>
</head>
<body>
<form action="/cgi-bin/hello_get.cgi" method="get">
First name:
<input type="text" name="first_name" value="" maxlength="100" />
</form>
</body>
</html>
```
This will produce the following result:

First name:  
Last name:  
Submit

**Global Attributes**

This tag supports all the global attributes described in - HTML Attribute Reference

**Specific Attributes**

The HTML `<form>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>accept</td>
<td>MIME_type</td>
<td>Specifies a comma-separated list of content types that the server accepts.</td>
</tr>
<tr>
<td>accept-charset</td>
<td>charset list</td>
<td>Specifies a list of character encodings that the server accepts. The default value is &quot;unknown&quot;.</td>
</tr>
<tr>
<td>action</td>
<td>URL</td>
<td>Specifies a URI/URL of the back-end script that will process the form.</td>
</tr>
<tr>
<td>autocomplete</td>
<td>on</td>
<td>Specifies whether form should have autocomplete on or off</td>
</tr>
<tr>
<td></td>
<td>off</td>
<td></td>
</tr>
<tr>
<td>enctype</td>
<td>mimetypes</td>
<td>The mime type used to encode the content of the form.</td>
</tr>
<tr>
<td>attribute</td>
<td>description</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>method</td>
<td>Specifies the HTTP method to use when the form is submitted. Possible values: get (the form data is appended to the URL when submitted) post (the form data is not appended to the URL)</td>
<td></td>
</tr>
<tr>
<td>name</td>
<td>Defines a unique name for the form.</td>
<td></td>
</tr>
<tr>
<td>novalidate</td>
<td>Specifies that the form should not be validated when submitted.</td>
<td></td>
</tr>
<tr>
<td>target</td>
<td>Target to open the given URL. _blank - the target URL will open in a new window _self - the target URL will open in the same frame as it was clicked _parent - the target URL will open in the parent frameset _top - the target URL will open in the full body of the window</td>
<td></td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML <frame> Tag**

**Description**

The HTML <frame> tag is used to specify each frame within a frameset tag. *This tag is not supported in HTML5.*

**Example**

```html
<!DOCTYPE html>
<html>
<head>
</head>
</html>
```
This will produce the following result, refer the image given below. The left frame is menu.htm and the right one is main.htm:

Specific Attributes

The HTML <frame> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>frameborder</td>
<td>0 or 1</td>
<td>Specifies whether or not to display border around the frame.</td>
</tr>
<tr>
<td>marginheight</td>
<td>pixels</td>
<td>Allows you to specify the width of the space between the left and right of the frame's borders and the frame's content. The value is given in pixels. For example marginwidth=&quot;10&quot;.</td>
</tr>
<tr>
<td>Attribute</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>marginwidth</td>
<td>Specifies the margin, in pixels, between the frame's contents and its left and right margins.</td>
<td></td>
</tr>
<tr>
<td>name</td>
<td>frame name</td>
<td></td>
</tr>
<tr>
<td>noresize</td>
<td>noresize</td>
<td></td>
</tr>
<tr>
<td>scrolling</td>
<td>yes, no, auto</td>
<td></td>
</tr>
<tr>
<td>src</td>
<td>URL</td>
<td></td>
</tr>
</tbody>
</table>

### Browsers Supported

<table>
<thead>
<tr>
<th>Browser</th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### HTML `<frameset>` Tag

**Description**

The HTML `<frameset>` tag is used to divide the window into frames. *This tag is not supported in HTML5.*

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML frameset Tag</title>
</head>
<body>
<frameset cols="200, *">
</body>
</html>
```
This will produce the following result, refer the image given below. The left frame is menu.htm and the right one is main.htm:

<table>
<thead>
<tr>
<th>Google</th>
<th>Microsoft</th>
<th>BBC News</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This is main page and content from any link will be displayed here.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>So now click any link and see the result.</td>
<td></td>
</tr>
</tbody>
</table>

**Specific Attributes**

The HTML `<frameset>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>cols</td>
<td>column size</td>
<td>Specifies the number of columns and their width in either pixels, percentages, or relative lengths. Default is 100%</td>
</tr>
<tr>
<td>rows</td>
<td>row size</td>
<td>Specifies the number of rows and their height in either pixels, percentages, or relative lengths. Default is 100%.</td>
</tr>
</tbody>
</table>
Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML <h1> to <h6> Tag**

**Description**

The HTML `<h1>` to `<h6>` tag is used to define headings in an HTML document. `<h1>` defines largest heading and `<h6>` defines smallest heading.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML <h1> to <h6> Tag</title>
</head>
<body>
<h1>Around the World</h1>
<h2>Asian Countries</h2>
<h3>India</h3>
</body>
</html>
```

This will produce the following result:

**Around the World**

**Asian Countries**

**India**

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Specific Attributes**

The HTML `<h1>` to `<h6>` tag also supports the following additional attributes:
### Attribute | Value | Description
--- | --- | ---
align | left right center justify | Deprecated - Specifies the alignment of the content enclosed.

### Event Attributes
This tag supports all the event attributes described in - [HTML Events Reference](#).

### Browser Support

<table>
<thead>
<tr>
<th>Browser</th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### HTML `<head>` Tag

#### Description
The HTML `<head>` tag is used for indicating the head section of the HTML document. Tags included inside head tags are not displayed on browser window.

#### Example
```html
<!DOCTYPE html>
<html>
<head>
<title>HTML head Tag</title>
</head>
<body>
actual content goes here
</body>
</html>
```

This will produce the following result:
```
actual content goes here
```

#### Specific Attributes
The HTML `<head>` tag also supports the following additional attributes:
**Attribute**  | **Value** | **Description**  
--- | --- | ---  
profile | URL | Specifies the URI/URL of one or more meta data profiles. *It is not supported in HTML5.*

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML Header Tag**

**Description**

The HTML `<header>` tag specifies a header for a document or section.

**Example**

```html
<!DOCTYPE html>
<html>
  <head>
    <title>HTML Header Tag</title>
  </head>
  <body>
    <header>
      <h1>Simply Easy Learning</h1>
      <p>You're visiting tutorialspoint.com - tutorial hub for simply easy learning.</p>
    </header>
  </body>
</html>
```

This will produce the following result:

**Simply Easy Learning**

You're visiting tutorialspoint.com - tutorial hub for simply easy learning.
Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Event Attributes
This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML <hr> Tag

Description
The HTML <hr> tag is used for creating a horizontal line. This is also called Horizontal Rule in HTML.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML hr Tag</title>
</head>
<body>
<p>This text will be followed by a horizontal line <hr /></p>
</body>
</html>
```

This will produce the following result:

```
This text will be followed by a horizontal line
```

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Specific Attributes
The HTML <hr> tag also supports the following additional attributes:
### Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#).

### Browser Support

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### HTML `<html>` Tag

#### Description

The HTML `<html>` tag is the container that contains all other HTML elements except for the !doctype tag which is located before the opening `<html>` tag. All other HTML elements are nested between the `<html>` and `</html>` tags.

#### Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML html Tag</title>
</head>
<body>
<p>Actual content goes here... </p>
</body>
</html>
```
Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Specific Attributes
The HTML <> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>manifest</td>
<td>URL</td>
<td>It is for offline browsing i.e. the address of the document's cache manifest.</td>
</tr>
<tr>
<td>xmlns</td>
<td><a href="http://www.w3.org/1999/xhtml">http://www.w3.org/1999/xhtml</a></td>
<td>Deprecated-Specifies the XML namespace attribute.</td>
</tr>
</tbody>
</table>

Event Attributes
This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML <> Tag

Description
The HTML <> tag is used to display the content in italic.

Example

```html
<!DOCTYPE html>
<html>
<head>
<body>
</body>
</html>
```
We liked the movie *3 Idiots*.

**Global Attributes**
This tag supports all the global attributes described in - [HTML Attribute Reference](#).

**Event Attributes**
This tag supports all the event attributes described in - [HTML Events Reference](#).

**Browser Support**

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML <iframe> Tag**

**Description**
The HTML `<iframe>` tag is used to create an inline frame.

**Example**

```
<!DOCTYPE html>
<html>
<head>
<title>HTML iframe Tag</title>
</head>
<body>
<iframe src ="http://www.tutorialspoint.com/index.htm" width="100%"></iframe>
</body>
</html>
```
This will produce the following result:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>align</td>
<td>left, right, top, middle, bottom</td>
<td>Specifies how to align the iframe according to the surrounding text</td>
</tr>
<tr>
<td>frameborder</td>
<td>1, 0</td>
<td>Specifies whether or not to display border around the frame.</td>
</tr>
<tr>
<td>height</td>
<td>pixels</td>
<td>Specifies the height of the inline frame.</td>
</tr>
<tr>
<td>longdesc</td>
<td>URL</td>
<td>A URL to a long description of the frame contents.</td>
</tr>
<tr>
<td>marginheight</td>
<td>pixels</td>
<td>Allows you to specify the width of the space between the left and right of the frame's borders and the frame's content. The value is given in pixels. For example marginwidth=&quot;10&quot;.</td>
</tr>
<tr>
<td>marginwidth</td>
<td>pixels</td>
<td>Specifies the margin, in pixels, between the frame's contents and it's left and right margins.</td>
</tr>
<tr>
<td>name</td>
<td>text</td>
<td>Name of the frame</td>
</tr>
<tr>
<td>sandbox</td>
<td>&quot;&quot;, allow-forms, allow-same-origin</td>
<td>Enables a set of extra restrictions for the content in the iframe.</td>
</tr>
</tbody>
</table>

The result will only work on Netscape 4.

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#).

**Specific Attributes**

The HTML `<iframe>` tag also supports the following additional attributes:
<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>allow-scripts</td>
<td>allow-top-navigation</td>
<td></td>
</tr>
<tr>
<td>scrolling</td>
<td>yes</td>
<td>Determines scrollbar action</td>
</tr>
<tr>
<td>no</td>
<td>auto</td>
<td></td>
</tr>
<tr>
<td>seamless</td>
<td>seamless</td>
<td>Specifies that the iframe should look like it is a part of the containing document</td>
</tr>
<tr>
<td>src</td>
<td>URL</td>
<td>Location of the frame contents file</td>
</tr>
<tr>
<td>srcdoc</td>
<td>HTML_code</td>
<td>Specifies the HTML content of the page to show in the iframe</td>
</tr>
<tr>
<td>width</td>
<td>pixels</td>
<td>Specifies the width of the inline frame</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#).

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### HTML <ilayer> Tag

**Description**

The HTML `<ilayer>` tag is used to create a layer that occupies space in the containing text flow. Subsequent content is placed after the space occupied by the `<ilayer>`.

This is in contrast to the `<layer>` tag, which creates a layer above the containing text flow, allowing subsequent content to be placed under the layer just created.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML ilayer Tag</title>
</head>
<body>
</body>
</html>
```
This &lt;ilayer top="4"&gt;word&lt;/ilayer&gt; is shifted down, while this &lt;ilayer left="10"&gt;one&lt;/ilayer&gt; is shifted over. With a negative value, words can be moved &lt;ilayer top="-4"&gt;up&lt;/ilayer&gt; and to the &lt;ilayer left="-10"&gt;left&lt;/ilayer&gt;.

This will produce the following result:

This word is shifted down, while this one is shifted over. With a negative value, words can be moved up and to the left.

The result will only work on Netscape 4.

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Specific Attributes**

The HTML &lt;ilayer&gt; tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>above</td>
<td>layer name</td>
<td>The name of the inline layer that will be positioned directly above the current layer in the z-order.</td>
</tr>
<tr>
<td>background</td>
<td>URL</td>
<td>A filename or URL for an image upon which the inline layer's text and images will appear.</td>
</tr>
<tr>
<td>below</td>
<td>layer name</td>
<td>The name of the inline layer that will be positioned directly below the current layer in the z-order.</td>
</tr>
<tr>
<td>bgcolor</td>
<td>rgb(x,x,x) #xxxxxx colorname</td>
<td>The color to use for the inline layer background.</td>
</tr>
<tr>
<td>clip</td>
<td>number</td>
<td>The coordinates of the inline layer's viewable area.</td>
</tr>
<tr>
<td>height</td>
<td>pixels</td>
<td>The inline layer's height, in pixels.</td>
</tr>
<tr>
<td>left</td>
<td>number</td>
<td>The position of the left side of the inline layer. If the current inline layer is part of another layer called the</td>
</tr>
</tbody>
</table>
parent layer-then the position is relative to the parent layer.

<table>
<thead>
<tr>
<th>name</th>
<th>layer name</th>
<th>The name of the inline layer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>pagex</td>
<td>number</td>
<td>The position of the left side of the inline layer relative to the browser window.</td>
</tr>
<tr>
<td>pagey</td>
<td>number</td>
<td>The position of the top of the inline layer relative to the browser window.</td>
</tr>
<tr>
<td>src</td>
<td>URL</td>
<td>The URL of a page that will appear inside the inline layer.</td>
</tr>
<tr>
<td>top</td>
<td>number</td>
<td>The position of the top of the inline layer. If the current inline layer is part of another layer--called the parent layer--then the position is relative to the parent layer.</td>
</tr>
<tr>
<td>visibility</td>
<td>show, hide, inherit</td>
<td>Determines whether the inline layer is visible.</td>
</tr>
<tr>
<td>width</td>
<td>pixels</td>
<td>The inline layer's width, in pixels.</td>
</tr>
<tr>
<td>z-index</td>
<td>number</td>
<td>The inline layer's position within the z-order. Inline layers with higher Z-INDEX values are positioned above inline layers with lower Z-INDEX values.</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#).

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
**HTML <img> Tag**

**Description**
The HTML `<img>` tag is used to put an image in an HTML document.

**Example**
```
<!DOCTYPE html>
<html>
<head>
<title>HTML Tag</title>
</head>
<body>
<img src="http://www.tutorialspoint.com/images/html.gif" alt="HTML Tutorial" height="150" width="140" />
</body>
</html>
```

This will produce the following result:

![Image](http://www.tutorialspoint.com/images/html.gif)

**Global Attributes**
This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Specific Attributes**
The HTML `<img>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>align</td>
<td>top, bottom, middle, left, right</td>
<td><em>Deprecated</em> - Specifies the alignment for the image.</td>
</tr>
<tr>
<td>Attribute</td>
<td>Type</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>alt</td>
<td>text</td>
<td>Specifies alternate text</td>
</tr>
<tr>
<td>border</td>
<td>pixels</td>
<td>Deprecated - Specifies the width of the image border.</td>
</tr>
<tr>
<td>crossOrigin</td>
<td>anonymous use-credentials</td>
<td>It allows images from third-party sites that allow cross-origin access to be reused with canvas.</td>
</tr>
<tr>
<td>height</td>
<td>pixels or %</td>
<td>Specifies the height of the image.</td>
</tr>
<tr>
<td>hspace</td>
<td>pixels</td>
<td>Deprecated - Amount of white space to be inserted to the left and right of the object.</td>
</tr>
<tr>
<td>ismap</td>
<td>URL</td>
<td>Defines the image as a server-side image map.</td>
</tr>
<tr>
<td>longdesc</td>
<td>text</td>
<td>Deprecated - Specifies a URI/URL of a long description - this can elaborate on a shorter description specified with the alt attribute.</td>
</tr>
<tr>
<td>src</td>
<td>URL</td>
<td>the url of an image</td>
</tr>
<tr>
<td>usemap</td>
<td>#mapname</td>
<td>Defines the image as a client-side image map and used alongwith &lt;map&gt; and &lt;area&gt; tags.</td>
</tr>
<tr>
<td>vspace</td>
<td>pixels</td>
<td>Deprecated - Amount of white space to be inserted to the top and bottom of the object.</td>
</tr>
<tr>
<td>width</td>
<td>pixels or %</td>
<td>Sets the width of an image in pixels or in %.</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#)
Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML <input> Tag**

**Description**
The HTML `<input>` tag is used within a form to declare an input element - a control that allows the user to input data.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML input Tag</title>
</head>
<body>
<form action="/cgi-bin/hello_get.cgi" method="get">
First name:
<input type="text" name="first_name" value="" maxlength="100" />
<br />
Last name:
<input type="text" name="last_name" value="" maxlength="100" />
<input type="submit" value="Submit" />
</form>
</body>
</html>
```

This will produce the following result:

First name: 
Last name: 
Submit
**Bottom of Form**

**Global Attributes**
This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Specific Attributes**
The HTML `<input>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>accept</td>
<td>content types</td>
<td>Specifies a comma-separated list of content types that the server accepts.</td>
</tr>
<tr>
<td>align</td>
<td>left, right, top, middle, bottom</td>
<td>Deprecated - Defines the alignment of content.</td>
</tr>
<tr>
<td>alt</td>
<td>text</td>
<td>This specifies text to be used in case the browser/user agent can't render the input control.</td>
</tr>
<tr>
<td>autocomplete</td>
<td>on, off</td>
<td>Specifies for enabling or disabling of autocomplete in <code>&lt;input&gt;</code> element.</td>
</tr>
<tr>
<td>autofocus</td>
<td>autofocus</td>
<td>Specifies that <code>&lt;input&gt;</code> element should automatically get focus when the page loads.</td>
</tr>
<tr>
<td>checked</td>
<td>checked</td>
<td>If type=&quot;radio&quot; or type=&quot;checkbox&quot; it will already be selected when the page loads.</td>
</tr>
<tr>
<td>disabled</td>
<td>disabled</td>
<td>Disables the input control. The button won't accept changes from the user. It also cannot receive focus.</td>
</tr>
<tr>
<td>Attribute</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>form</strong></td>
<td>Specifies one or more forms and will be skipped when tabbing.</td>
<td></td>
</tr>
<tr>
<td>form_id</td>
<td>URL</td>
<td></td>
</tr>
<tr>
<td><strong>formaction</strong></td>
<td>URL that will process the input control when the form is submitted.</td>
<td></td>
</tr>
<tr>
<td><strong>formenctype</strong></td>
<td>application/x-www-form-urlencoded multipart/form-data text/plain.</td>
<td></td>
</tr>
<tr>
<td><strong>formmethod</strong></td>
<td>Defines the HTTP method for sending data to the action URL.</td>
<td></td>
</tr>
<tr>
<td>formnovalidate</td>
<td>Defines that form elements should not be validated when submitted.</td>
<td></td>
</tr>
<tr>
<td><strong>formtarget</strong></td>
<td>Specifies the target where the response will be displayed that is received after submitting the form.</td>
<td></td>
</tr>
<tr>
<td><strong>height</strong></td>
<td>Specifies the height.</td>
<td></td>
</tr>
<tr>
<td><strong>list</strong></td>
<td>Specifies the &lt;datalist&gt; element that contains pre-defined options for an &lt;input&gt; element.</td>
<td></td>
</tr>
<tr>
<td>datalist_id</td>
<td>Specifies the maximum value.</td>
<td></td>
</tr>
<tr>
<td>max</td>
<td>Specifies the maximum number of characters allowed in a text field.</td>
<td></td>
</tr>
<tr>
<td><strong>maxlength</strong></td>
<td>Specifies the minimum value.</td>
<td></td>
</tr>
<tr>
<td>min</td>
<td>Specifies the minimum value.</td>
<td></td>
</tr>
<tr>
<td>Attribute</td>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>--------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>multiple</td>
<td>multiple</td>
<td>Specifies that a user can enter multiple values</td>
</tr>
<tr>
<td>name</td>
<td>text</td>
<td>Assigns a name to the input control.</td>
</tr>
<tr>
<td>pattern</td>
<td>regexp</td>
<td>Specifies a regular expression that an <code>&lt;input&gt;</code> element's value is checked against</td>
</tr>
<tr>
<td>placeholder</td>
<td>text</td>
<td>Specifies a short hint that describes the expected value.</td>
</tr>
<tr>
<td>readonly</td>
<td>readonly</td>
<td>Sets the input control to read-only. It won't allow the user to change the value. The control however, can receive focus and are included when tabbing through the form controls.</td>
</tr>
<tr>
<td>required</td>
<td>required</td>
<td>Specifies that an input field must be filled out before submitting the form</td>
</tr>
<tr>
<td>size</td>
<td>number</td>
<td>Specifies the width of the control. If <code>type=&quot;text&quot;</code> or <code>type=&quot;password&quot;</code> this refers to the width in characters. Otherwise it's in pixels.</td>
</tr>
<tr>
<td>src</td>
<td>URL</td>
<td>Defines the URL of the image to display. Used only for <code>type=&quot;image&quot;</code>.</td>
</tr>
<tr>
<td>step</td>
<td>number</td>
<td>Specifies the legal number intervals for an input field</td>
</tr>
<tr>
<td>type</td>
<td>button checkbox color date datetimelocal email</td>
<td>Specifies the type of control.</td>
</tr>
</tbody>
</table>
The HTML `<ins>` tag is used to indicate newly inserted text.

### Example

```html
<!DOCTYPE html>
<html>
</html>
```
<head>
<title>HTML ins Tag</title>
</head>
<body>
<p>Following text is inserted newly <ins>HTML ins tag</ins></p>
</body>
</html>

This will produce the following result:

Following text is inserted newly HTML ins tag

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Specific Attributes**

The HTML `<ins>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>cite</td>
<td>URL</td>
<td>Defines a URL to another document which explains why the text was deleted.</td>
</tr>
<tr>
<td>datetime</td>
<td>YYYYMMDD HH:MM:SS</td>
<td>Defines the date and time the text was deleted.</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
HTML `<isindex>` tag

Description
The HTML `<isindex>` tag is used for querying a document through a text field. The tag can be used anywhere but head tag is preferable. It is a deprecated tag and should not be used.

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML isindex Tag</title>
<isindex prompt = "Search" />
</head>
</html>
```

Global Attributes
This tag supports all the global attributes described in - [HTML Attribute Reference](#).

Specific Attributes
The HTML `<isindex>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>prompt</td>
<td>string</td>
<td>Label for the text field</td>
</tr>
<tr>
<td>action</td>
<td>URL</td>
<td>used when a query needs to be sent to a different URL</td>
</tr>
</tbody>
</table>

Event Attributes
This tag supports all the event attributes described in - [HTML Events Reference](#).

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (partial)</td>
<td>Yes (partial)</td>
<td>Yes (partial)</td>
<td>Yes (partial)</td>
<td>Yes (partial)</td>
<td>No</td>
</tr>
</tbody>
</table>
HTML <kbd> Tag

Description
The HTML <kbd> tag defines keyboard input. It is a phrase tag.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML kbd Tag</title>
</head>
<body>
<p>Open previously closed tab using <kbd>Ctrl</kbd>+<kbd>Shift</kbd>+<kbd>T</kbd></p>
</body>
</html>
```

This will produce the following result:

```
Open previously closed tab using Ctrl+Shift+T
```

Global Attributes
This tag supports all the global attributes described in - [HTML Attribute Reference](#)

Event Attributes
This tag supports all the event attributes described in - [HTML Events Reference](#)

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML keygen Tag

Description
The HTML <keygen> tag is used to process Web forms with certificate management systems. The element generates a secure key and submits the public key.
Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML keygen Tag</title>
</head>
<body>
<form>
    <keygen name="random_key" challenge="0987654321">
    <input name="firstname" value="first name">
</form>
</body>
</html>
```

This will produce the following result:

```
first name
```

**Bottom of Form**

**Global Attributes**
This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Specific Attributes**
The HTML `<keygen>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>autofocus</td>
<td>autofocus</td>
<td>Specifies that when the page loads the <code>&lt;keygen&gt;</code> element automatically gets focus.</td>
</tr>
<tr>
<td>challenge</td>
<td>challenge</td>
<td>Specifies the challenge string to be packaged with the public key in the PublicKeyAndChallenge for use in verification of the form submission. If no challenge string is provided, then it is encoded as an IA5STRING of length zero.</td>
</tr>
<tr>
<td>disabled</td>
<td>disabled</td>
<td>Specifies that <code>&lt;keygen&gt;</code> element should be disabled.</td>
</tr>
</tbody>
</table>
form | form_id | Specifies one or more forms.
---|---|---
keytype | rsa | rsa
dsa | dsa | ec | Specifies the secret algorithm which is for the key.
name | autofocus | Specifies a name.

Event Attributes
This tag supports all the event attributes described in - [HTML Events Reference](#)

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML `<label>` Tag

Description
The HTML `<label>` tag is used to add a label to a form control like text, textarea etc.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML label Tag</title>
</head>
<body>
<label for="email">EMAIL-ID:<br />
<input type="email" value="" name="emailid" size="30" placeholder="Enter a valid email address"><br />

<label for="phone">PHONE NO:<br />
<input type="text" value="" name="phno" size="30" maxlength="10" placeholder="Enter a valid phone number" pattern="[0-9]{10}"><br />

</body>
</html>
```

This will produce the following result:
Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

Specific Attributes

The HTML `<label>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>form</td>
<td>form_id</td>
<td>It specifies one or more forms the label belongs to</td>
</tr>
<tr>
<td>for</td>
<td>control id</td>
<td>Specifies the input control that this label is for. This value must be the same as the value in the input control's &quot;id&quot; attribute.</td>
</tr>
</tbody>
</table>

Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML `<layer>` Tag**

**Description**

The HTML `<layer>` tag is used to position and animate (through scripting) elements in a page. A layer can be thought of as a separate document that resides on top of the main one, all existing within one window.

This tag has support in Netscape 4 and higher versions of it.
Example
This example creates three overlapping layers. The back one is red, the middle one is blue, and the front one is green.

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML layer Tag</title>
</head>
<body>
<layer id="layer1" top="250" left="50" width="200"
       height="200" bgcolor="red">
    <p>layer 1</p>
</layer>
<layer id="layer2" top="350" left="150" width="200"
       height="200" bgcolor="blue">
    <p>layer 2</p>
</layer>
<layer id="layer3" top="450" left="250" width="200"
       height="200" bgcolor="green">
    <p>layer 3</p>
</layer>
</body>
</html>
```

This will produce the following result, it will work in Netscape 4 and higher versions.

layer 1

layer 2

layer 3

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Specific Attributes
The HTML <layer> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
</table>

240
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>above</td>
<td>layer name</td>
<td>The name of the inline layer that will be positioned directly above the current layer in the z-order.</td>
</tr>
<tr>
<td>background</td>
<td>URL</td>
<td>A filename or URL for an image upon which the inline layer's text and images will appear.</td>
</tr>
<tr>
<td>below</td>
<td>layer name</td>
<td>The name of the inline layer that will be positioned directly below the current layer in the z-order.</td>
</tr>
<tr>
<td>bgcolor</td>
<td>rgb(x,x,x) or #xxxxxx colorname</td>
<td>The color to use for the inline layer background.</td>
</tr>
<tr>
<td>clip</td>
<td>number</td>
<td>The coordinates of the inline layer's viewable area.</td>
</tr>
<tr>
<td>height</td>
<td>pixels</td>
<td>The inline layer's height, in pixels.</td>
</tr>
<tr>
<td>left</td>
<td>number</td>
<td>The position of the left side of the inline layer. If the current inline layer is part of another layer called the parent layer, then the position is relative to the parent layer.</td>
</tr>
<tr>
<td>name</td>
<td>layer name</td>
<td>The name of the inline layer.</td>
</tr>
<tr>
<td>pagex</td>
<td>number</td>
<td>The position of the left side of the inline layer relative to the browser window.</td>
</tr>
<tr>
<td>pagey</td>
<td>number</td>
<td>The position of the top of the inline layer relative to the browser window.</td>
</tr>
<tr>
<td>src</td>
<td>URL</td>
<td>The URL of a page that will appear inside the inline layer.</td>
</tr>
<tr>
<td>top</td>
<td>number</td>
<td>The position of the top of the inline layer. If the current inline layer is part of another layer called the parent layer, then the position is relative to the parent layer.</td>
</tr>
<tr>
<td>visibility</td>
<td>show, hide, inherit</td>
<td>Determines whether the inline layer is visible.</td>
</tr>
<tr>
<td>width</td>
<td>pixels</td>
<td>The inline layer's width, in pixels.</td>
</tr>
<tr>
<td>z-index number</td>
<td>The inline layer's position within the z-order. Inline layers with higher Z-INDEX values are positioned above inline layers with lower Z-INDEX values.</td>
<td></td>
</tr>
</tbody>
</table>

**Event Attributes**
This tag supports all the event attributes described in - [HTML Events Reference](#).

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**HTML <legend> Tag**

**Description**
The HTML `<legend>` tag is used to define a caption for `<fieldset>` tag.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML legend Tag</title>
</head>
<body>
<form>
<fieldset>
  <legend>Details</legend>
  Student Name: <input type="text"><br />
  MCA Subjects:<input type="text"><br />
  Course Link:<input type="url" name="websitelink">
</fieldset>
</form>
</body>
</html>
```
This will produce the following result:

Details
Student Name: [Name]
MCA
Course Link: [Course Link]
Subjects: [Subjects]

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Specific Attributes
The HTML <legend> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>align</td>
<td>top</td>
<td>Deprecated - Specifies the content alignment.</td>
</tr>
<tr>
<td></td>
<td>bottom</td>
<td></td>
</tr>
<tr>
<td></td>
<td>left</td>
<td></td>
</tr>
<tr>
<td></td>
<td>right</td>
<td></td>
</tr>
</tbody>
</table>

Event Attributes
This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML <li>Tag

Description
The HTML <li> tag is used for specifying a list item in ordered, unordered, directory, and menu lists.

Example

```html
<!DOCTYPE html>
<html>
```
**<head>
<title>HTML li Tag</title>
</head>
<body>
<ul>
<li>ol - ordered list</li>
<li>ul - unordered list</li>
<li>dir - directory list</li>
<li>menu - menu list</li>
</ul>
</body>
</html>

This will produce the following result:

- ol - ordered list
- ul - unordered list
- dir - directory list
- menu - menu list

**Global Attributes**

This tag supports all the global attributes described in [HTML Attribute Reference](#).

**Specific Attributes**

The HTML `<li>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>type</td>
<td>A, a, I, i, 1, disc, square, circle</td>
<td><strong>Deprecated</strong> - Specifies the type of the list.</td>
</tr>
<tr>
<td>value</td>
<td>number</td>
<td>Specifies the value of a list item.</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in [HTML Events Reference](#).
Browser Support

<table>
<thead>
<tr>
<th>Browser</th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML <link> Tag

Description
The HTML <link> tag is used for defining a link to an external document. It is placed in the <head> section of the document.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML link Tag</title>
<link rel="stylesheet" href="stylenew.css">
</head>
<body>
<div id="contentinfo">
<p>Welcome to our website. We provide tutorials on various subjects.</p>
</div>
</body>
</html>
```

Here is the css file stylenew.css

```css
#contentinfo p {
  line-height: 20px;
  margin: 30px;
  padding-bottom: 20px;
  text-align: justify;
  width: 140px;
  color: red;
}
```

This will produce the following result:
Global Attributes

This tag supports all the global attributes described in - HTML Attribute Reference

Specific Attributes

The HTML <link> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>charset</td>
<td>charset</td>
<td>Defines the character encoding of the linked document.</td>
</tr>
<tr>
<td>href</td>
<td>URL</td>
<td>Specifies the URL of the resource document.</td>
</tr>
<tr>
<td>hreflang</td>
<td>language</td>
<td>Language code of the destination URL</td>
</tr>
<tr>
<td>media</td>
<td>screen tty tv projection handheld print braille aural all</td>
<td>Specifies the device the document will be displayed on</td>
</tr>
<tr>
<td>rel</td>
<td>alternate appendix bookmark chapter contents copyright glossary help home</td>
<td>Describes the relationship between the current document and the destination URL.</td>
</tr>
</tbody>
</table>
Describes a reverse between the destination URI and the current document.

<table>
<thead>
<tr>
<th>Event Attributes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifies the size of the linked resource.</td>
<td></td>
</tr>
<tr>
<td>Specifies the target frame to load the page into.</td>
<td></td>
</tr>
<tr>
<td>The MIMEtype of content at the link destination</td>
<td></td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](https://www.w3.org/standards/htmledge/Events.html)

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
**HTML Main Tag**

**Description**
The HTML `<main>` tag specifies main or important content in the document. It can be used only once per page and can't be used as a descendent of `<article>`, `<aside>`, `<footer>`, `<header>`, `<nav>` element.

**Example**

```html
<!DOCTYPE html>
<html>
  <body>
    <main>
      <h1>Learning</h1>
      <p>Learn to gain experience and try to share your knowledge with others.</p>
      <article>
        <h3>Web Development Tutorials</h3>
        <p>Consist of CSS, HTML, and PHP tutorials for 2nd Semester exams.</p>
      </article>
      <article>
        <h3>Academic Tutorials</h3>
        <p>Consist of Computer Fundamental, Computer Network tutorials for 1st Semester exams.</p>
      </article>
    </main>
  </body>
</html>
```

This will produce the following result:

**Learning**
Learn to gain experience and try to share your knowledge with others.

**Web Development Tutorials**
Consist of CSS, HTML, and PHP tutorials for 2nd Semester exams.

**Academic Tutorials**
Consist of Computer Fundamental, Computer Network tutorials for 1st Semester exams.

**Global Attributes**
This tag supports all the global attributes described in - [HTML Attribute Reference](#)
Event Attributes
This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

HTML <map> Tag

Description
The HTML <map> tag is used for defining an image map along with <img> tag.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML map Tag</title>
</head>
<body>
<img src="/images/html.gif" alt="HTML Map" border="0" usemap="#html"/>

<!-- Create Mappings -->
<map name="html">
  <area shape="circle"
       coords="154,150,59" href="about/about_team.htm" alt="Team"
       target="_self" />
</map>
</body>
</html>
```
This will produce the following result, find the image map on bottom right:

![HTML](image)

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Specific Attributes**

The HTML `<map>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>unique_name</td>
<td>Defines a unique name for the map tag.</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML Mark Tag**

**Description**

The HTML `<mark>` tag specifies a text highlighted for reference purposes, that is for its relevance in another context.

**Example**

```html
<!DOCTYPE html>
<html>
```
<head>
<title>HTML Mark Tag</title>
</head>
<body>
<h2>Cricketers in India</h2>
<p>Sachin Tendulkar is <mark>god</mark> of cricket.</p>
</body>
</html>

This will produce the following result:

Cricketers in India
Sachin Tendulkar is god of cricket.

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Event Attributes
This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML <marquee> Tag

Description
The HTML <marquee> tag is used for scrolling piece of text or image displayed either horizontally across or vertically down your web site page depending on the settings.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML marquee Tag</title>
</head>
<body>
</body>
</html>
```
This is basic example of marquee
The direction of text will be from bottom to top.

Global Attributes
This tag supports all the global attributes described in - [HTML Attribute Reference](#)

Specific Attributes
The HTML `<marquee>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>behavior</td>
<td>scroll, slide, alternate</td>
<td>Defines the type of scrolling.</td>
</tr>
<tr>
<td>bgcolor</td>
<td>rgb(x,x,x) #xxxxxx colormame</td>
<td>Deprecated-Defines the direction of scrolling the content.</td>
</tr>
<tr>
<td>direction</td>
<td>up, down, left, right</td>
<td>Defines the direction of scrolling the content.</td>
</tr>
<tr>
<td>height</td>
<td>pixels or %</td>
<td>Defines the height of marquee.</td>
</tr>
<tr>
<td>hspace</td>
<td>pixels</td>
<td>Specifies horizontal space around the marquee.</td>
</tr>
<tr>
<td>loop</td>
<td>number</td>
<td>Specifies how many times to loop. The default value is INFINITE, which means that the marquee loops endlessly.</td>
</tr>
<tr>
<td>scrolldelay</td>
<td>seconds</td>
<td>Defines how long to delay between each jump.</td>
</tr>
</tbody>
</table>
scrollamount | number | Defines how how far to jump.
width         | pixels or % | Defines the width of marquee.
vspace        | pixels | Specifies vertical space around the marquee.

Event Attributes
This tag supports all the event attributes described in - [HTML Events Reference](#)

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>?</td>
</tr>
</tbody>
</table>

**HTML <menu> Tag**

Description
The HTML `<menu>` tag is used for creating a menu list. This tag has been deprecated in HTML and redefined in HTML5.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML menu Tag</title>
</head>
<body>
    <menu>
        <li>ol - ordered list</li>
        <li>ul - unordered list</li>
        <li>dir - directory list</li>
        <li>menu - menu list</li>
    </menu>
</body>
</html>
```

This will produce the following result:
Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Specific Attributes
The HTML <menu> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>label</td>
<td>text</td>
<td>Specifies a visible label.</td>
</tr>
<tr>
<td>type</td>
<td>popup, toolbar, context</td>
<td>Specifies the type of menu to be displayed.</td>
</tr>
</tbody>
</table>

Event Attributes
This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

HTML <menuitem> tag

Description
The HTML <menuitem> tag is used for defining a menu item for a menu.

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML menuitem Tag</title>
</head>
<body>
</body>
```
This will produce the following result in Firefox browser only:

```
Right-click inside here....
```

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#).

### Specific Attributes

The HTML `<menuitem>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>checked</code></td>
<td>checked</td>
<td>defines that a menuitem should be checked</td>
</tr>
<tr>
<td><code>command</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>default</code></td>
<td>default</td>
<td>a menuitem is marked as a default command</td>
</tr>
<tr>
<td><code>disabled</code></td>
<td>disabled</td>
<td>disables a menuitem and cannot be clicked</td>
</tr>
<tr>
<td><code>icon</code></td>
<td>url</td>
<td>defines an icon for a menuitem</td>
</tr>
<tr>
<td><code>label</code></td>
<td>text</td>
<td>defines a name for a menuitem which is displayed to the user</td>
</tr>
<tr>
<td><code>radiogroup</code></td>
<td>groupname</td>
<td>defiens a group of commands out of which only one can be selected</td>
</tr>
</tbody>
</table>
### HTML `<meta>` tag

#### Function
The HTML `<meta>` tag is used for declaring metadata for the HTML document.

#### Difference between HTML and XHTML
In HTML the `<meta>` tag has no end tag.
In XHTML the `<meta>` tag must be properly closed.

#### Example
```html
<html>
<head>
<title>HTML meta tag</title>
<meta name="keywords" content="HTML, meta tag, metadata" />
<meta name="description" content="Brief description of the document" />
<meta http-equiv="refresh" content="10" />
</head>
<body style="background-color:orange">
Document content goes here
</body>
</html>
```

For more detail on Meta Tag please go through [Meta Tag](#)
## Attributes

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>author description keywords generator revised others</td>
<td>Name for the property.</td>
</tr>
<tr>
<td>content</td>
<td>text</td>
<td>Defines meta information to be associated with http-equiv or name.</td>
</tr>
<tr>
<td>http-equiv</td>
<td>content-type expires refresh set-cookie</td>
<td>Connects the content attribute to an HTTP header.</td>
</tr>
<tr>
<td>scheme</td>
<td>text</td>
<td>Defines a format to be used to interpret the value of the content attribute.</td>
</tr>
</tbody>
</table>

### Standard Attributes

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dir</td>
<td>Specifies the direction of the text</td>
</tr>
<tr>
<td>lang</td>
<td>Sets the language code.</td>
</tr>
<tr>
<td>xml:lang</td>
<td>Sets the language code.</td>
</tr>
</tbody>
</table>

## HTML <meter> Tag

### Description

The HTML `<meter>` tag specifies a scalar measurement within a known range (a gauge).

### Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML meter Tag</title>
</head>
<title>HTML meter Tag</title>
</head>
```
<body>
  <meter value="7" min="0" max="10">2 out of 10</meter><br />
  <p>gauge value can be seen here</p>
</body>

This will produce the following result:

gauge value can be seen here

**Global Attributes**

This tag supports all the global attributes described in [HTML Attribute Reference](#).

**Specific Attributes**

The HTML `<meter>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>form</td>
<td>form_id</td>
<td>Specifies one or more forms.</td>
</tr>
<tr>
<td>high</td>
<td>number</td>
<td>Specifies high value range.</td>
</tr>
<tr>
<td>low</td>
<td>number</td>
<td>Specifies low value range.</td>
</tr>
<tr>
<td>max</td>
<td>number</td>
<td>Specifies the maximum value of the range</td>
</tr>
<tr>
<td>min</td>
<td>number</td>
<td>Specifies the minimum value of the range</td>
</tr>
<tr>
<td>optimum</td>
<td>number</td>
<td>Specifies the optimal value.</td>
</tr>
<tr>
<td>value</td>
<td>number</td>
<td>Specifies current value of the gauge - Required.</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in [HTML Events Reference](#).

**Browser Support**
**HTML `<multicol>` tag**

**Function**
The HTML `<multicol>` tag is used to create multiple columns of text and lets you control the size and number of the columns.

The `<multicol>` tag can contain any other HTML content, much like the `<div>` tag. All of the content within the `<multicol>` tag is displayed just like conventional content, except that Netscape 4 places the contents into multiple columns instead of just one.

This tag is supported by Netscape 3 and higher versions only.

**Difference between HTML and XHTML**
NONE

**Example**
Following example will create a three columns layout in Netscape 4.

```html
<h1>Breaking News</h1>
<multicol cols=3>
<p>State media said more than 2,000 soldiers, police and miners closed the breach in the dike in Shandong province early Sunday and installed pipes and five high-speed pumps, but gave no indication if there were any signs of life.<p>
<p>The Huayuan Mining Co. mine flooded on Friday afternoon when the Wen river burst a dike, sending water pouring into a shaft and trapping 172 miners, Xinhua and state television said.<p>
</multicol>
```

**Attributes**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>cols</td>
<td>number</td>
<td>specifies the number of text columns for the text display. The browser attempts to flow elements evenly across the columns to make each column be about the same height. Unless the WIDTH attribute is present, column width is adjusted to fill the available width.</td>
</tr>
<tr>
<td>Attribute</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>class</td>
<td>Document wide identifier</td>
<td></td>
</tr>
<tr>
<td>dir</td>
<td>Specifies the direction of the text</td>
<td></td>
</tr>
<tr>
<td>id</td>
<td>Document wide identifier</td>
<td></td>
</tr>
<tr>
<td>style</td>
<td>Helps to include inline cascadubf style sheet.</td>
<td></td>
</tr>
<tr>
<td>lang</td>
<td>Sets the language code.</td>
<td></td>
</tr>
<tr>
<td>xml:lang</td>
<td>Sets the language code.</td>
<td></td>
</tr>
</tbody>
</table>

**HTML `<nav>` Tag**

**Description**
The HTML `<nav>` tag specifies a section that contains only navigation links.

**Example**
```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Nav Tag</title>
</head>
<body>
<p>Database Tutorials:</p>
<nav>
<a href="dbms/index.htm">DBMS</a> |
<a href="mongodb/index.htm">MongoDB</a> |
<a href="mysql/index.htm">MySQL</a> |
<a href="plsql/index.htm">PL/SQL</a> |
```
```
This will produce the following result:

Database Tutorials:

DBMS | MongoDB | MySQL | PL/SQL | SQL

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Event Attributes
This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML `<nobr>` Tag**

**Description**

The HTML `<nobr>` tag is used to instruct the browser not to break the specified text (such as the usual line wrap that occurs at the right edge of the browser window).

This is used with the `<wbr>` tag, `<wbr>` advises the extended browser when it may insert a line break in an otherwise nonbreakable sequence of text. Unlike the `<br>` tag, which always causes a line break, even within a `<nobr>`-tagged segment, the `<wbr>` tag works only when placed inside a `<nobr>`-tagged content segment and causes a line break only if the current line has already extended beyond the browser's display window margins.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML nobr Tag</title>
</head>
<title>HTML nobr Tag</title>
</head>
```
This is a very long sequence of text that is forced to be on a single line, even if doing so causes the browser to extend the document window beyond the size of the viewing pane and the poor user must scroll right to read the entire line.

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Browser Support
This tag is available in Netscape 4 and higher version only.

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

HTML <noembed> Tag

Description
The HTML <noembed> tag is used to handle browsers which do not support the <embed> tag. The <noembed> tag makes it easy to supply alternative content that tells users what they are missing.

Example
<!DOCTYPE html>
<html>
<head>
<title>HTML noembed Tag</title>
</head>
</html>
The message inside `<noembed>` tag will appear only when your browser does not support `<embed>` tag. So based on your browser it will display following result:

### Browser Support

<table>
<thead>
<tr>
<th>Browser</th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### HTML `<noframes>` Tag

**Description**

The HTML `<noframes>` tag is used to handle the browsers which do not support `<frame>` tag. This tag is used to display alternate text message.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML noframes Tag</title>
</head>
<body>
<frameset cols="200, *">
    <frame src="/html/menu.htm" name="menu_page"/>
    <frame src="/html/main.htm" name="main_page"/>
    <noframes>
        Your browser does not support frames.
    </noframes>
</frameset>
</body>
```
This will produce the following result, refer the image given below. The left frame is menu.htm and the right one is main.htm. If the browser doesn't support frames, it will display the message "Your browser does not support frames."

```
<html>
<head>
<title>HTML noscript Tag</title>
</head>
<body>
<script type="text/JavaScript">

This is main page and content from any link will be displayed here.
So now click any link and see the result.

```

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Browser Support

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML <noscript> Tag**

**Description**
The HTML <noscript> tag is used to handle the browsers which do recognize <script> tag but do not support scripting. This tag is used to display alternate text message.

**Example**

```
<!DOCTYPE html>
<html>
<head>
<title>HTML noscript Tag</title>
</head>
<body>
<script type="text/JavaScript">
```
This will produce the following result, browser that doesn't support will show the text under <noscript> tag as output ie. "Your browser does not support JavaScript!".

Hello JavaScript!

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML <object> Tag

Description
The HTML <object> tag is used to embed multimedia in an HTML document. The <param> tag is also used along with this tag to define various parameters.

Example

```html
<!DOCTYPE html>
<html>
<head>
    <title>HTML object Tag</title>
</head>
<body>
</body>
```
<object data="data/test.htm" type="text/html" width="300" height="200">
    alt : <a href="data/test.htm">test.htm</a>
</object>
</body>
</html>

This will produce the following result:

alt : test.htm

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Specific Attributes**

The HTML `<object>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>align</td>
<td>left</td>
<td>Defines visual alignment of the object</td>
</tr>
<tr>
<td></td>
<td>right</td>
<td></td>
</tr>
<tr>
<td></td>
<td>top</td>
<td></td>
</tr>
<tr>
<td></td>
<td>bottom</td>
<td></td>
</tr>
<tr>
<td>archive</td>
<td>URL</td>
<td>A space separated list of URL's to archives.</td>
</tr>
<tr>
<td>border</td>
<td>pixels</td>
<td>Specifies border width around the object</td>
</tr>
<tr>
<td>classid</td>
<td>Class ID</td>
<td>Defines a class ID value as set in the Windows Registry or a URL.</td>
</tr>
<tr>
<td>codebase</td>
<td>URL</td>
<td>Specifies the path where object code is located.</td>
</tr>
<tr>
<td>codetype</td>
<td>mime type</td>
<td>The internet media type of the code referred to by the classid attribute.</td>
</tr>
<tr>
<td>data</td>
<td>URL</td>
<td>Specifies the URL for Object data.</td>
</tr>
<tr>
<td>declare</td>
<td>declare</td>
<td>Defines that the object should only be declared, not created or instantiated until needed.</td>
</tr>
<tr>
<td>height</td>
<td>pixels</td>
<td>Specifies the height of the object.</td>
</tr>
</tbody>
</table>
**hspace** | **pixels** | Specifies the horizontal space around the object.
--- | --- | ---
**name** | **object name** | Specifies a unique name for the object
**standby** | **text** | Defines a text to display while the object is loading.
**type** | **mime type** | Defines the MIME type of data specified in the data attribute.
**usemap** | **URL** | Specifies a URL of a client-side image map to be used with the object.
**vspace** | **pixels** | Specifies the vertical space around the object.
**width** | **pixels** | Specifies the width of the object.

**Event Attributes**
This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML `<ol>` Tag**

**Description**
The HTML `<ol>` tag is used for creating an ordered list.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML ol Tag</title>
</head>
```
<body>
<ol>
<li>ol - ordered list</li>
<li>ul - unordered list</li>
<li>dir - directory list</li>
<li>menu - menu list</li>
</ol>
</body>

This will produce the following result:

- ol - ordered list
- ul - unordered list
- dir - directory list
- menu - menu list

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#).

**Specific Attributes**

The HTML `<ol>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>compact</td>
<td>autofocus</td>
<td>Defines if compact rendering is required.</td>
</tr>
<tr>
<td>reversed</td>
<td>reversed</td>
<td>Specifies the order of the list (descending).</td>
</tr>
<tr>
<td>start</td>
<td>number</td>
<td>Specifies the initial number to start the list.</td>
</tr>
<tr>
<td>type</td>
<td>A, a, I, i</td>
<td>Specifies the style of the list.</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#).

**Browser Support**
### HTML `<optgroup>` Tag

**Description**
The HTML `<optgroup>` tag is used for grouping related options within your select list. This makes it easier for users to comprehend their choices when looking at a large list.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML optgroup Tag</title>
</head>
<body>
<select>
<optgroup label="India">
  <option value="mumbai">Mumbai</option>
  <option value="delhi">Delhi</option>
</optgroup>
<optgroup label="USA">
  <option value="florida">Florida</option>
  <option value="newyork">New York</option>
</optgroup>
</select>
</body>
</html>
```

This will produce the following result:

```
select
  option
    value="mumbai">Mumbai
  option
    value="delhi">Delhi
```

**Global Attributes**
This tag supports all the global attributes described in - [HTML Attribute Reference](#)
Specific Attributes
The HTML `<optgroup>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>disabled</td>
<td>disabled</td>
<td>Disables the input control. The button won't accept changes from the user. It also cannot receive focus and will be skipped when tabbing.</td>
</tr>
</tbody>
</table>
| label     | text  | Defines a label to use when using `<optgroup>`.

Event Attributes
This tag supports all the event attributes described in - [HTML Events Reference](#).

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML `<option>` Tag

Description
The HTML `<option>` tag is used within a form for defining options in the drop-down list.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML option Tag</title>
</head>
<body>
<form action="/cgi-bin/dropdown.cgi" method="post">
<select name="dropdown">
  <option value="Java" selected>Maths</option>
  <option value="Ruby">Physics</option>
</select>
<input type="submit" value="Submit" />
</form>
</body>
</html>
```
This will produce the following result:

![Java dropdown menu with options and a submit button](image)

### Global Attributes
This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Specific Attributes
The HTML `<option>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>disabled</td>
<td>disabled</td>
<td>Disables the input control. The button won’t accept changes from the user. It also cannot receive focus and will be skipped when tabbing.</td>
</tr>
<tr>
<td>label</td>
<td>text</td>
<td>Defines a label to use when using <code>&lt;optgroup&gt;</code>.</td>
</tr>
<tr>
<td>selected</td>
<td>selected</td>
<td>Defines the default option to be selected when page loads.</td>
</tr>
<tr>
<td>value</td>
<td>text</td>
<td>Specifies the value of the option to be sent to the server.</td>
</tr>
</tbody>
</table>

### Event Attributes
This tag supports all the event attributes described in - [HTML Events Reference](#)

### Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

271
**HTML <output> Tag**

**Description**
The HTML <output> tag specifies the result of a calculation.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Output Tag</title>
</head>
<body>
<form oninput="sumresult.value=parseInt(z1.value)+parseInt(z2.value)+parseInt(z3.value)">
<input type="range" name="z1" value="0" />
+ 
<input type="number" name="z2" value="20" />
+ 
<input type="number" name="z3" value="40" />
The output is:  <output name="sumresult"></output>
</form>
</body>
</html>
```

This will produce the following result:

![Image of calculation result]

The output is: 60

**Global Attributes**
This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Specific Attributes**
The HTML <output> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
</table>

...
List of IDs of other elements, i.e it indicates the elements who have contributed input value to the calculation.

Enables to place output elements anywhere within a document.

It is the name of the element.

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th>Browser</th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

**HTML <p> Tag**

**Description**

The HTML <p> tag defines a paragraph of text.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML p Tag</title>
</head>
<body>
<p>This paragraph is defined using the HTML p tag</p>
</body>
</html>
```

This will produce the following result:

This paragraph is defined using the HTML p tag

**Global Attributes**
This tag supports all the global attributes described in - HTML Attribute Reference

Specific Attributes
The HTML <p> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>align</td>
<td>left, right, center, justify</td>
<td>Specifies text alignment within a paragraph.</td>
</tr>
</tbody>
</table>

Event Attributes
This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML <param> Tag

Description
The HTML <param> tag is used for passing parameters to an embedded object using <object> tag.

Example
You can specify some parameters related to the document with the tag. Here is an example to embed a wav file:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML param Tag</title>
</head>
<body>
<object title="Test Object." classid="java.class">
  <param name="audio" value="music.wav" />
  <param name="width" value="600" />
</object>
</body>
</html>
```
The HTML `<param>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>parameter type</td>
<td>Defines a unique name for the parameter.</td>
</tr>
<tr>
<td>type</td>
<td>MIME type</td>
<td>Specifies the internet media type for the parameter.</td>
</tr>
<tr>
<td>value</td>
<td>value</td>
<td>Specifies the value of the parameter.</td>
</tr>
<tr>
<td>valuetype</td>
<td>data ref object</td>
<td>Specifies the MIME type of the value.</td>
</tr>
</tbody>
</table>

This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
</table>

This will produce the following result:

```html
<param name="height" value="400" />
</object>
</body>
</html>
```
HTML <plaintext> Tag

Description
The HTML <plaintext> tag is used to render all text in the document exactly as it was typed in, including all tags and even the document tags.

This tag ignores all formatting for the rest of the document, displaying all text exactly as is. It cannot be stopped, it cannot be turned off. It is deprecated because it messes up the balance of the document tags.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML plaintext Tag</title>
</head>
<body>

</body>
</html>
```

Browser Support
This tag is available in Netscape 4 and higher version only.

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

HTML <pre> Tag

Description
The HTML <pre> tag is used for indicating preformatted text. The code tag surrounds the code being marked up.

Browsers normally render pre text in a fixed-pitched font, with whitespace in tact, and without word wrap.

Example
<!DOCTYPE html>
<html>
<head>
<title>HTML pre Tag</title>
</head>
<body>
<pre>
This text is
in a fixed-pitch
font, and it preserves
both spaces and line breaks
</pre>
</body>
</html>

This will produce the following result:

This text is
in a fixed-pitch
font, and it preserves
both spaces and line breaks

Global Attributes

This tag supports all the global attributes described in - HTML Attribute Reference

Specific Attributes

The HTML <pre> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>width</td>
<td>number</td>
<td>Deprecated: It specifies the desired width of the pre-formatted text.</td>
</tr>
</tbody>
</table>

Event Attributes

This tag supports all the event attributes described in - HTML Events Reference
Browser Support

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML Progress Tag

Description
The HTML <progress> tag specifies a completion progress of a task. It is displayed as a progress bar. The value of progressbar can be manipulated by JavaScript.

Example

```html
<!DOCTYPE html>
<html>
<head>
    <title>HTML Progress Tag</title>
</head>
<body>
    <h1>Student's Intelligence level</h1>
    <progress value="20" max="100"/>
</body>
</html>
```

This will produce the following result:

Student's Intelligence Level

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Specific Attributes
The HTML `<progress>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>max</td>
<td>max</td>
<td>It should have a value greater than zero and a valid floating point number.</td>
</tr>
<tr>
<td>value</td>
<td>value</td>
<td>Specifies how much of the task that has been completed. It should be a floating point number between 0 and max or 0 and 1 if max is omitted.</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#).

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML `<q>` Tag**

**Description**

The HTML `<q>` tag is used for indicating short quotations (i.e. quotations that span multiple lines).

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML q Tag</title>
</head>
<body>
Here comes a short quotation: <q> here is a short quotation </q>
</body>
</html>
```
This will produce the following result:

```
Here comes a short quotation: here is a short quotation
```

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#).

**Specific Attributes**

The HTML `<q>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>cite</td>
<td>URL</td>
<td>URL of the quote, if it is taken from the web.</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#).

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML Rp Tag**

**Description**

The HTML `<rp>` tag specifies to show browsers that do not support the ruby annotations. Ruby Annotations are used in East Asian typography.

**Example**

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Rp Tag</title>
</head>
<body>
  <ruby>
    漢 <rp>(</rp><rt>Kan</rt><rp>)</rp>
    字 <rp>(</rp><rt>ji</rt><rp>)</rp>
  </ruby>
</body>
</html>
```
This will produce the following result:

漢字

**Global Attributes**
This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Event Attributes**
This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Not Supported</td>
<td>Yes</td>
<td>Not Supported</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML Rt Tag**

**Description**
The HTML `<rt>` tag is used for pronunciation of character in ruby annotations. These are for showing pronunciation of East Asian characters.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Rt Tag</title>
</head>
<body>
<ruby>
漢 <rp>(</rp><rt>Kan</rt><rp>)</rp>

字 <rp>(</rp><rt>ji</rt><rp>)</rp>
</ruby>
</body>
</html>
```
This will produce the following result:

Kanji 漢字

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Event Attributes
This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Not Supported</td>
<td>Yes</td>
<td>Not Supported</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML Ruby Tag

Description
The HTML <ruby> tag specifies ruby annotations which are for East Asian characters’ pronunciation.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Ruby Tag</title>
</head>
<body>
<ruby>
æ­­£¬¥ <rp>(</rp><rt>This is it</rt><rp>)</rp>
</ruby>
</body>
</html>
```
This will produce the following result:

This is it

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Event Attributes
This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Not Supported</td>
<td>Yes</td>
<td>Not Supported</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML <strike> Tag

Description
The HTML <strike> tag specifies strikethrough text. This tag is deprecated now, <del> should be used instead.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML strike Tag</title>
</head>
<body>
The HTML strike tag renders a <strike>strike</strike> through the middle of the text.
</body>
</html>
```

This will produce the following result:

The HTML strike tag renders a strike through the middle of the text.

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Event Attributes

This tag supports all the event attributes described in - HTML Events Reference

HTML Phrase Elements

Function

Phrase elements add structural information to text fragments. The usual meanings of phrase elements are following:

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;abbr&gt;</code></td>
<td>Indicates an abbreviated form like pvt. inc. etc.</td>
</tr>
<tr>
<td><code>&lt;acronym&gt;</code></td>
<td>Indicates an acronym (e.g., WAC, radar, etc.).</td>
</tr>
<tr>
<td><code>&lt;em&gt;</code></td>
<td>Indicates emphasis.</td>
</tr>
<tr>
<td><code>&lt;strong&gt;</code></td>
<td>Indicates stronger emphasis.</td>
</tr>
<tr>
<td><code>&lt;cite&gt;</code></td>
<td>Contains a citation or a reference to other sources.</td>
</tr>
<tr>
<td><code>&lt;dfn&gt;</code></td>
<td>Indicates that this is the defining instance of the enclosed term.</td>
</tr>
<tr>
<td><code>&lt;code&gt;</code></td>
<td>Designates a fragment of computer code.</td>
</tr>
<tr>
<td><code>&lt;samp&gt;</code></td>
<td>Designates sample output from programs, scripts, etc.</td>
</tr>
<tr>
<td><code>&lt;kbd&gt;</code></td>
<td>Indicates text to be entered by the user.</td>
</tr>
<tr>
<td><code>&lt;var&gt;</code></td>
<td>Indicates an instance of a variable or program argument.</td>
</tr>
</tbody>
</table>

Difference between HTML and XHTML

NONE

Example

```html
<abbr>pvt. or inc.</abbr><br />
<acronym>HTML</acronym><br />
<cite>Citation</cite><br />
<em>Emphasized text</em><br />
<strong>Strong text</strong><br />
<dfn>Definition term</dfn><br />
```
This will produce following result:

<table>
<thead>
<tr>
<th>pvt.</th>
<th>or</th>
<th>inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTML</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emphasized</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Strong</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer</td>
<td>sample</td>
<td>code</td>
</tr>
<tr>
<td>Sample</td>
<td>computer</td>
<td>code</td>
</tr>
<tr>
<td>Keyboard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Online Practice**

To Become more comfortable - [Do Online Practice](#)

**Standard Attributes**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>class</td>
<td>Document wide identifier</td>
</tr>
<tr>
<td>dir</td>
<td>Specifies the direction of the text</td>
</tr>
<tr>
<td>id</td>
<td>Document wide identifier</td>
</tr>
<tr>
<td>title</td>
<td>Specifies a title to associate with the element.</td>
</tr>
<tr>
<td>style</td>
<td>Helps to include inline cascadubf style sheet.</td>
</tr>
<tr>
<td>lang</td>
<td>Sets the language code.</td>
</tr>
</tbody>
</table>

**Event Attributes**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>onclick</td>
<td>Script runs when a mouse click</td>
</tr>
<tr>
<td>ondblclick</td>
<td>Script runs when a mouse double-click</td>
</tr>
<tr>
<td>onmousedown</td>
<td>Script runs when mouse button is pressed</td>
</tr>
<tr>
<td>onmouseup</td>
<td>Script runs when mouse button is released</td>
</tr>
<tr>
<td>onmouseover</td>
<td>Script runs when mouse pointer moves over an element</td>
</tr>
<tr>
<td>onmousemove</td>
<td>Script runs when mouse pointer moves</td>
</tr>
<tr>
<td>onmouseout</td>
<td>Script runs when mouse pointer moves out of an element</td>
</tr>
<tr>
<td>onkeydown</td>
<td>Script runs when key is pressed</td>
</tr>
<tr>
<td>onkeyup</td>
<td>Script runs when key is released</td>
</tr>
</tbody>
</table>

**Browser Support**

<table>
<thead>
<tr>
<th>Browser</th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML <script> Tag**

**Description**

The HTML `<script>` tag is used for declaring a script (such as JavaScript) within your HTML document.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML script Tag</title>
</head>
```
<body>
<script type="text/JavaScript">
    document.write("You're visiting tutorialspoint!")
</script>
</body>
</html>

This will produce the following result:

You're visiting tutorialspoint!

For more detail on <script> tag please check [HTML Scripts] chapter.

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference]

**Specific Attributes**

The HTML <script> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>async</td>
<td>sync</td>
<td>Specifies that the script is executed asynchronously.</td>
</tr>
<tr>
<td>charset</td>
<td>charset</td>
<td>Defines the character encoding that the script uses.</td>
</tr>
<tr>
<td>defer</td>
<td>defer</td>
<td>Declares that the script will not generate any content. Therefore, the browser/user agent can continue parsing and rendering the rest of the page.</td>
</tr>
<tr>
<td>src</td>
<td>URL</td>
<td>Specifies a URI/URL of an external script.</td>
</tr>
<tr>
<td>type</td>
<td>text/JavaScript</td>
<td>Specifies the scripting language as a content-type (MIME type).</td>
</tr>
<tr>
<td></td>
<td>application/ecmascript</td>
<td></td>
</tr>
</tbody>
</table>
Event Attributes
This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML Section Tag

Description
The HTML <section> tag specifies a section in a document.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Section Tag</title>
</head>
<body>
<section>
<h1>Java</h1>
<h3>Inheritance</h3>
<p>Inheritance defines the relationship between superclass and subclass.</p>
</section>
</body>
</html>
```

This will produce the following result:
Java

Inheritance
Inheritance defines the relationship between superclass and subclass.

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Event Attributes
This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Browser</th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML <select> Tag

Description
The HTML <select> tag is used within a form for defining a select list.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML select Tag</title>
</head>
<body>
<form action="/cgi-bin/dropdown.cgi" method="post">
<select name="dropdown">
<option value="Data Structures" selected> Data Structures </option>
<option value="Data Mining"> Data Mining </option>
</select>
<input type="submit" value="Submit"/>
</form>
</body>
</html>
```
This will produce the following result:

![Data Structures](image1)

Submit

Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

Specific Attributes

The HTML `<select>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>autofocus</td>
<td>autofocus</td>
<td>Specifies that on page load the drop-down list should automatically get focus.</td>
</tr>
<tr>
<td>disabled</td>
<td>disabled</td>
<td>Disables the input control. The button won't accept changes from the user. It also cannot receive focus and will be skipped when tabbing.</td>
</tr>
<tr>
<td>form</td>
<td>form_id</td>
<td>Specifies one or more forms.</td>
</tr>
<tr>
<td>multiple</td>
<td>multiple</td>
<td>When set, it specifies that multiple items can be selected at a time</td>
</tr>
<tr>
<td>name</td>
<td>name</td>
<td>Assigns a name to the input control.</td>
</tr>
<tr>
<td>required</td>
<td>required</td>
<td>Before submitting the form the user is required to select a value, else it won't proceed ahead.</td>
</tr>
<tr>
<td>size</td>
<td>number</td>
<td>Defines the number of visible items in the drop-down list</td>
</tr>
</tbody>
</table>

Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

Browser Support
HTML <spacer> Tag

Description
The HTML <spacer> tag specifies a whitespace.

Example
```html
<!DOCTYPE html>
<html>
<head>
<title>HTML spacer Tag</title>
</head>
<body>
Create some space <spacer type="block" width="50" /> here.
</body>
</html>
```

<spacer> tag is available in Netscape 4 and higher version only. This will produce the following result:

Create some space here.

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Specific Attributes
The HTML <object> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>type</td>
<td>vertical</td>
<td>The type attribute is used to specify whether the spacer will be horizontal, vertical, or block.</td>
</tr>
<tr>
<td></td>
<td>horizontal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>block</td>
<td></td>
</tr>
<tr>
<td>size</td>
<td>number</td>
<td>Specifies the number of pixels tall or wide the spacer will be. This attribute is only used if the spacer type is &quot;horizontal&quot; or &quot;vertical.&quot; If the spacer type is &quot;block,&quot; then the width attribute is used.</td>
</tr>
<tr>
<td>-------</td>
<td>--------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>width</td>
<td>number</td>
<td>The width attribute is used when the spacer type=&quot;block&quot;. Between the quotes specify a pixel value for the width of the block.</td>
</tr>
<tr>
<td>height</td>
<td>number</td>
<td>The height attribute is used when the spacer type=&quot;block&quot;. Between the quotes specify a pixel value for the height of the block.</td>
</tr>
<tr>
<td>align</td>
<td>left right center</td>
<td>The align tag is used to specify the alignment of the block of white space. Valid alignments are left, right, and center.</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#).  

**Browser Support**

This tag is available in Netscape 4 and higher version only.

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**HTML <small> Tag**

**Description**

The HTML `<small>` tag makes the font size one size smaller.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
  <title>HTML small Tag</title>
</head>
```
Global Attributes

This tag supports all the global attributes described in - HTML Attribute Reference

Event Attributes

This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML <source> tag

Description

The HTML <source> tag is used for defining multimedia resources for <audio> and <video> elements. The browser can make a choice from the source based on media type and codec support.

```html
<!doctype html>
<html>
<head>
<title>HTML source Tag</title>
</head>
<body>
<audio controls>
<source src = "yourfile.mp3">
</audio>
</body>
</html>
```
<p>The browser does not support the file</p>
</audio>
</body>
</html>

This will produce the following result:

```
this will be shown in a dialog
```

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#).

**Specific Attributes**

The HTML `<source>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>media</td>
<td>media_query</td>
<td>defines the type of media resource</td>
</tr>
<tr>
<td>src</td>
<td>URL</td>
<td>URL of the media file</td>
</tr>
<tr>
<td>type</td>
<td>media_type</td>
<td>media type of media resource</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#).

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (4.0)</td>
<td>Yes (3.5)</td>
<td>Yes (9)</td>
<td>Yes (10.5)</td>
<td>Yes (4.0)</td>
<td>No</td>
</tr>
</tbody>
</table>

**HTML `<span>` Tag**

**Description**

The HTML `<span>` tag is used for grouping and applying styles to inline elements.
There is a difference between the span tag and the div tag. The span tag is used with inline elements whilst the div tag is used with block-level content.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML span Tag</title>
</head>
<body>
<p>This is a paragraph</p>
<p><span style="color:#FF0000;">This is a paragraph</span></p>
<p>This is another paragraph</p>
</body>
</html>
```

This will produce the following result:

This is a paragraph This is a paragraph
This is another paragraph

**Global Attributes**

This tag supports all the global attributes described in [HTML Attribute Reference](#).

**Event Attributes**

This tag supports all the event attributes described in [HTML Events Reference](#).

**Browser Support**

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML <strike> Tag**

**Description**
The HTML `<strike>` tag specifies strikethrough text. This tag is deprecated now, `<del>` should be used instead.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML strike Tag</title>
</head>
<body>
The HTML strike tag renders a `<strike>strike</strike>` through the middle of the text.
</body>
</html>
```

This will produce the following result:

The HTML strike tag renders a strike through the middle of the text.

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th>Browser</th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML `<strong>` tag**

**Description**

The HTML `<strong>` tag is used for emphasizing an important text.

```html
<!DOCTYPE html>
<html>
<head>
</head>
```
This will produce the following result:

This is a **strong** text

**Global Attributes**
This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Event Attributes**
This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Event</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**HTML <style> tag**

**Function**
The HTML `<style>` tag is used for declaring style sheets within the head of your HTML document.

**Difference between HTML and XHTML:**
NONE

**Example**

```html
<head>
<style type="text/css">
  h1 { color:#F1F1F1 }
</style>
</head>
```
For more detail on `<style>` tag please check [HTML Styles](#) chapter.

**Online Practice**
To Become more comfortable - [Do Online Practice](#)

**Attributes**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>type</td>
<td>text/css</td>
<td>Specifies the style sheet language as a content-type (MIME type).</td>
</tr>
<tr>
<td>media</td>
<td>screen tty tv projection handheld print braille aural all</td>
<td>Specifies the device the document will be displayed on.</td>
</tr>
</tbody>
</table>

**Standard Attributes**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dir</td>
<td>Specifies the direction of the text</td>
</tr>
<tr>
<td>id</td>
<td>Document wide identifier</td>
</tr>
<tr>
<td>lang</td>
<td>Sets the language code.</td>
</tr>
<tr>
<td>xml:space</td>
<td>Sets the language code.</td>
</tr>
</tbody>
</table>

**HTML `<sub>` Tag**

**Description**
The HTML `<sub>` tag is used for defining subscript text.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML sub Tag</title>
</head>
<title>HTML sub Tag</title>
</head>
```
Value of $y_1 - y_3 = 17$

This will produce the following result:

Value of $y_1 - y_3 = 17$

Global Attributes
This tag supports all the global attributes described in - [HTML Attribute Reference](#)

Event Attributes
This tag supports all the event attributes described in - [HTML Events Reference](#)

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML Summary Tag

Description
The HTML `<summary>` tag specifies a summary, caption or legend for a given details.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Summary Tag</title>
</head>
<body>
<details>
  <summary>Some details</summary>
  <p>Provide more info about the details here.</p>
</details>
</section>
```
Global Attributes
This tag supports all the global attributes described in - [HTML Attribute Reference](#).

Event Attributes
This tag supports all the event attributes described in - [HTML Events Reference](#).

Browser Support

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Not Supported</td>
<td>Not Supported</td>
<td>Not Supported</td>
<td>Not Supported</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML `<sup>` Tag

Description
The HTML `<sup>` tag is used for defining superscript text.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML sup Tag</title>
</head>
<body>
Value of 5<sup>2</sup> + 3<sup>3</sup> = 52
</body>
</html>
```

This will produce the following result:
Value of $5^2 + 3^3 = 52$

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Event Attributes
This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Browser</th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML <table> Tag

Description
The HTML <table> tag is used for defining a table. The table tag contains other tags that define the structure of the table.

Example

```html
<!DOCTYPE html>
<html>
<head>
    <title>HTML table Tag</title>
</head>
<body>
    <table border="1">
        <tr>
            <th>Team</th>
            <th>Ranking</th>
        </tr>
        <tr>
            <td>India</td>
            <td>1</td>
        </tr>
    </table>
</body>
</html>
```
This will produce the following result:

<table>
<thead>
<tr>
<th>Team</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>1</td>
</tr>
<tr>
<td>South Africa</td>
<td>2</td>
</tr>
<tr>
<td>Australia</td>
<td>3</td>
</tr>
</tbody>
</table>

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Specific Attributes**

The HTML `<table>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>abbr</td>
<td>abbreviated_text</td>
<td><em>Deprecated</em>- Specifies an abbreviated version of the content in a cell.</td>
</tr>
<tr>
<td>align</td>
<td>right, left, center, justify, char</td>
<td><em>Deprecated</em>- Visual alignment.</td>
</tr>
<tr>
<td>bgcolor</td>
<td>rgb(x,x,x), #hexcode, colorname</td>
<td><em>Deprecated</em>- Specifies the background color of the table.</td>
</tr>
<tr>
<td>Attribute</td>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>border</td>
<td>pixels</td>
<td><em>Deprecated</em>- Specifies the border width. A value of &quot;0&quot; means no border.</td>
</tr>
<tr>
<td>cellpadding</td>
<td>pixels or %</td>
<td><em>Deprecated</em>- Specifies the space between the cell borders and their contents.</td>
</tr>
<tr>
<td>cellspacing</td>
<td>pixels or %</td>
<td><em>Deprecated</em>- Specifies the space between cells.</td>
</tr>
<tr>
<td>frame</td>
<td>void above below lhs rhs vsides box border</td>
<td><em>Deprecated</em>- Used in conjunction with the border attribute, specifies which side of the frame that makes up the border surrounding the table is displayed.</td>
</tr>
<tr>
<td>rules</td>
<td>none groups rows cols all</td>
<td><em>Deprecated</em>- Used in conjunction with the border attribute, specifies which rules appear between the cells of the table.</td>
</tr>
<tr>
<td>summary</td>
<td>text</td>
<td><em>Deprecated</em>- Specifies the summary of the content.</td>
</tr>
<tr>
<td>width</td>
<td>pixels or %</td>
<td><em>Deprecated</em>- Specifies the width of the table.</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#).

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML <tbody> Tag**

**Description**
The HTML `<tbody>` tag is used in adding a body to a table. The `tbody` tag is used in conjunction with the `thead` tag and the `tfoot` tag in determining each part of the table (header, footer, body).

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML tbody Tag</title>
</head>
<body>
<table style="width:100%" border="1">
<thead>
<tr>
<td colspan="4">This is the head of the table</td>
</tr>
</thead>
<tbody>
<tr>
<td>Cell 1</td>
<td>Cell 2</td>
<td>Cell 3</td>
<td>Cell 4</td>
</tr>
<tr>
...more rows here containing four cells...
</tr>
</tbody>
</table>
</body>
</html>
```
This will produce the following result:

...more rows here containing four cells... ...more rows here containing four cells...

This is the head of the table

<table>
<thead>
<tr>
<th>Cell 1</th>
<th>Cell 2</th>
<th>Cell 3</th>
<th>Cell 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cell 1</td>
<td>Cell 2</td>
<td>Cell 3</td>
<td>Cell 4</td>
</tr>
</tbody>
</table>

This is the foot of the table

Global Attributes

This tag supports all the global attributes described in - HTML Attribute Reference

Specific Attributes

The HTML <tbody> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>align</td>
<td>right</td>
<td>Deprecated-Visual alignment.</td>
</tr>
<tr>
<td></td>
<td>left</td>
<td></td>
</tr>
<tr>
<td></td>
<td>center</td>
<td></td>
</tr>
<tr>
<td></td>
<td>justify</td>
<td></td>
</tr>
<tr>
<td></td>
<td>char</td>
<td></td>
</tr>
</tbody>
</table>
###_HTML <td> Tag

**Description**

The HTML `<td>` tag is used for specifying a cell or table data within a table.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML td Tag</title>
</head>
<body>
<table border="1">
  <tr>
    <th>Subject</th>
    <th>Topic</th>
  </tr>
</table>
</body>
</html>
```
This will produce the following result:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Java</td>
<td>Threading</td>
</tr>
<tr>
<td>C++</td>
<td>Virtual Functions</td>
</tr>
<tr>
<td>Linux</td>
<td>File Systems</td>
</tr>
</tbody>
</table>

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#).

**Specific Attributes**

The HTML `<td>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>abbr</td>
<td>abbreviated_text</td>
<td>Deprecated-Specifies an abbreviated version of the content in a cell.</td>
</tr>
<tr>
<td>align</td>
<td>right</td>
<td>left</td>
</tr>
<tr>
<td>Attribute</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>axis</strong></td>
<td><code>name</code> <strong>Deprecated</strong> - Specifies a category for this td. This can potentially be used to perform queries against the table data and can be beneficial in the context of a speech browser.</td>
<td></td>
</tr>
<tr>
<td><strong>bgcolor</strong></td>
<td><code>rgb(x,x,x)</code> #hexcode <code>colname</code> <strong>Deprecated</strong> - Specifies the background color of the table cell.</td>
<td></td>
</tr>
<tr>
<td><strong>char</strong></td>
<td><code>character</code> <strong>Deprecated</strong> - Specifies which character to align text on. Used when align=&quot;char&quot;</td>
<td></td>
</tr>
<tr>
<td><strong>charoff</strong></td>
<td><code>pixels</code> or <code>%</code> <strong>Deprecated</strong> - Specifies an alignment offset (either in pixels or percentage value) against the first character as specified with the char attribute. Used when align=&quot;char&quot;</td>
<td></td>
</tr>
<tr>
<td><strong>colspan</strong></td>
<td><code>number</code> Specifies the number of columns the current cell spans across.</td>
<td></td>
</tr>
<tr>
<td><strong>header</strong></td>
<td><code>id</code> Specifies a space-separated list of header cells that contain information about this cell. The value needs to correspond with the id of the header cell (which is set using the id attribute). This attribute is useful for non-visual browsers.</td>
<td></td>
</tr>
<tr>
<td><strong>height</strong></td>
<td><code>pixels</code> <strong>Deprecated</strong> - Specifies the height of the table cell.</td>
<td></td>
</tr>
<tr>
<td><strong>nowrap</strong></td>
<td><code>nowrap</code> <strong>Deprecated</strong> - Prevents text from automatically wrapping.</td>
<td></td>
</tr>
<tr>
<td><strong>rowspan</strong></td>
<td><code>numbers</code> Specifies the number of rows the current cell spans across.</td>
<td></td>
</tr>
<tr>
<td><strong>scope</strong></td>
<td><code>col</code> <code>colgroup</code> <code>row</code> <code>rowgroup</code> <strong>Deprecated</strong> - This attribute is used on header cells and specifies the cells that will use this header's information.</td>
<td></td>
</tr>
</tbody>
</table>
### Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

### Browser Support

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### HTML textarea Tag

#### Description

The HTML `<textarea>` tag is used within a form to declare a textarea element - a control that allows the user to input text over multiple rows.

#### Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML textarea Tag</title>
</head>
<body>
<form action="/cgi-bin/hello_get.cgi" method="get">
Fill the Detail: <br />
<textarea rows="5" cols="50" name="description">
Enter your name
</textarea>
<input type="submit" value="submit" />
</form>
</body>
</html>
```
This will produce the following result:

Fill the Detail:

---

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Specific Attributes**

The HTML `<textarea>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>autofocus</td>
<td>autofocus</td>
<td>Specifies that on page load the text area should automatically get focus.</td>
</tr>
<tr>
<td>cols</td>
<td>number</td>
<td>Specifies the width of the textarea based on the number of visible character widths.</td>
</tr>
<tr>
<td>disabled</td>
<td>disabled</td>
<td>Specifies the width of the textarea based on the number of visible character widths.</td>
</tr>
<tr>
<td>form</td>
<td>form_id</td>
<td>Specifies one or more forms.</td>
</tr>
<tr>
<td>maxlength</td>
<td>number</td>
<td>Specifies the maximum number of characters in textarea.</td>
</tr>
<tr>
<td>name</td>
<td>text</td>
<td>Assigns a name to the input control.</td>
</tr>
<tr>
<td>placeholder</td>
<td>text</td>
<td>Specifies a short hint of the value in textarea.</td>
</tr>
<tr>
<td>readonly</td>
<td>readonly</td>
<td>Sets the input control to read-only. It won't allow the user to change the value. The control however, can receive focus and are included when tabbing through the form controls.</td>
</tr>
</tbody>
</table>
**HTML**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>required</td>
<td></td>
<td>Specifies that a textarea is required</td>
</tr>
<tr>
<td>rows</td>
<td>number</td>
<td>Specifies the height of the textarea based on the number of visible lines of text. If there's more text than this allows, users can scroll using the textarea's scrollbars.</td>
</tr>
<tr>
<td>wrap</td>
<td>hard soft</td>
<td>Specifies the text to be wrapped in textarea.</td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML <tfoot> Tag**

**Description**

The HTML `<tfoot>` tag is used in adding a footer to a table. The `tfoot` tag is used in conjunction with the `tbody` tag and the `thead` tag in determining each part of the table (header, footer, body).

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML tfoot Tag</title>
</head>
<body>
<table width="100%" border="1">
<thead>
<tr>
<td colspan="4">This is the head of the table</td>
</tr>
</thead>
</table>
</body>
</html>
```
This will produce the following result:

...more rows here containing four cells... ...more rows here containing four cells...

<table>
<thead>
<tr>
<th>This is the head of the table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cell 1</td>
</tr>
</tbody>
</table>

...more rows here containing four cells... ...more rows here containing four cells...
Global Attributes

This tag supports all the global attributes described in - HTML Attribute Reference

Specific Attributes

The HTML `<tfoot>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>align</td>
<td>right</td>
<td>Deprecated-Visual alignment.</td>
</tr>
<tr>
<td></td>
<td>left</td>
<td></td>
</tr>
<tr>
<td></td>
<td>center</td>
<td></td>
</tr>
<tr>
<td></td>
<td>justify</td>
<td></td>
</tr>
<tr>
<td></td>
<td>char</td>
<td></td>
</tr>
<tr>
<td>char</td>
<td>character</td>
<td>Deprecated-Specifies which character to align text on. Used when align=&quot;char&quot;</td>
</tr>
<tr>
<td>charoff</td>
<td>pixels or %</td>
<td>Deprecated-Specifies an alignment offset (either in pixels or percentage value) against the first character as specified with the char attribute. Used when align=&quot;char&quot;</td>
</tr>
<tr>
<td>valign</td>
<td>top</td>
<td>Deprecated-Vertical alignment.</td>
</tr>
<tr>
<td></td>
<td>middle</td>
<td></td>
</tr>
<tr>
<td></td>
<td>bottom</td>
<td></td>
</tr>
<tr>
<td></td>
<td>baseline</td>
<td></td>
</tr>
</tbody>
</table>

Event Attributes

This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
**HTML <th> Tag**

**Description**
The HTML `<th>` tag is used for specifying a header cell or table header within a table.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML th Tag</title>
</head>
<body>
<table border="1">
  <tr>
    <th>ID</th>
    <th>Product Details</th>
  </tr>
  <tr>
    <td>00L1</td>
    <td>i3, 500gb laptop</td>
  </tr>
</table>
</body>
</html>
```

This will produce the following result:

<table>
<thead>
<tr>
<th>ID</th>
<th>Product Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>00L1</td>
<td>i3, 500gb laptop</td>
</tr>
</tbody>
</table>

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#).

**Specific Attributes**

The HTML `<th>` tag also supports the following additional attributes:
<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>abbr</td>
<td>abbreviated_text</td>
<td>Deprecated-Specifies an abbreviated version of the content in a header cell.</td>
</tr>
<tr>
<td>align</td>
<td>right, left, center, justify, char</td>
<td>Deprecated-Content alignment in header cell.</td>
</tr>
<tr>
<td>axis</td>
<td>name</td>
<td>Deprecated-Specifies a category for this th.</td>
</tr>
<tr>
<td>bgcolor</td>
<td>rgb(x,x,x), #hexcode, colorname</td>
<td>Deprecated-Specifies the background color of the header cell.</td>
</tr>
<tr>
<td>char</td>
<td>character</td>
<td>Deprecated-Specifies which character to align text on. Used when align=&quot;char&quot;</td>
</tr>
<tr>
<td>charoff</td>
<td>pixels or %</td>
<td>Deprecated-Specifies an alignment offset (either in pixels or percentage value) against the first character as specified with the char attribute. Used when align=&quot;char&quot;</td>
</tr>
<tr>
<td>colspan</td>
<td>number</td>
<td>Specifies the number of columns the header cell spans across.</td>
</tr>
<tr>
<td>headers</td>
<td>id</td>
<td>Specifies one or more header cells a cell is related to.</td>
</tr>
<tr>
<td>height</td>
<td>pixels</td>
<td>Deprecated-Specifies the height of the header cell.</td>
</tr>
<tr>
<td>nowrap</td>
<td>nowrap</td>
<td>Deprecated-Prevents text from automatically wrapping.</td>
</tr>
<tr>
<td>rowspan</td>
<td>numbers</td>
<td>Specifies the number of rows the header cell spans across.</td>
</tr>
<tr>
<td>scope</td>
<td>col, colgroup, row, rowgroup</td>
<td>This attribute is used on header cells and specifies the cells that will use this header's information.</td>
</tr>
</tbody>
</table>
HTML <thead> Tag

Description
The HTML <thead> tag is used in adding a header to a table. The thead tag is used in conjunction with the tbody tag and the tfoot tag in determining each part of the table (header, footer, body).

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML thead Tag</title>
</head>
<body>
<table style="width:100%" border="1">
<thead>
<tr>
<td colspan="4">This is the head of the table</td>
</tr>
</thead>
</table>
```

Event Attributes

This tag supports all the event attributes described in [HTML Events Reference](#).

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
<td colspan="4">This is the foot of the table</td>
</tr>
</tfoot>
<tbody>
<tr>
<td>Cell 1</td>
<td>Cell 2</td>
<td>Cell 3</td>
<td>Cell 4</td>
</tr>
...more rows here containing four cells...
</tr>
</tbody>
</table>

This will produce the following result:

...more rows here containing four cells...  
...more rows here containing four cells...

This is the head of the table

<table>
<thead>
<tr>
<th>Cell 1</th>
<th>Cell 2</th>
<th>Cell 3</th>
<th>Cell 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cell 1</td>
<td>Cell 2</td>
<td>Cell 3</td>
<td>Cell 4</td>
</tr>
</tbody>
</table>
Global Attributes

This tag supports all the global attributes described in - HTML Attribute Reference

Specific Attributes

The HTML <thead> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>align</td>
<td>right</td>
<td>Deprecated - Visual alignment.</td>
</tr>
<tr>
<td></td>
<td>left</td>
<td></td>
</tr>
<tr>
<td></td>
<td>center</td>
<td></td>
</tr>
<tr>
<td></td>
<td>justify</td>
<td></td>
</tr>
<tr>
<td></td>
<td>char</td>
<td></td>
</tr>
<tr>
<td>char</td>
<td>character</td>
<td>Deprecated - Specifies which character to align text on. Used when align=&quot;char&quot;</td>
</tr>
<tr>
<td>charoff</td>
<td>pixels or %</td>
<td>Deprecated - Specifies an alignment offset (either in pixels or percentage value) against the first character as specified with the char attribute. Used when align=&quot;char&quot;</td>
</tr>
<tr>
<td>valign</td>
<td>top</td>
<td>Deprecated - Vertical alignment.</td>
</tr>
<tr>
<td></td>
<td>middle</td>
<td></td>
</tr>
<tr>
<td></td>
<td>bottom</td>
<td></td>
</tr>
<tr>
<td></td>
<td>baseline</td>
<td></td>
</tr>
</tbody>
</table>

Event Attributes

This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
**HTML `<time>` tag**

**Description**
The HTML `<time>` tag is used for displaying the human readable date and time.

```html
<!doctype html>
<html>
<head>
<title>HTML time Tag</title>
</head>
<body>
<p>The time is <time>12:51 pm</time></p>
</body>
</html>
```

This will produce the following result:

`The time is 12:51 pm`

**Global Attributes**
This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Specific Attributes**
The HTML `<time>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>datetime</td>
<td>datetime</td>
<td>it is machine readable date time</td>
</tr>
</tbody>
</table>

**Event Attributes**
This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (6.0)</td>
<td>Yes (4.0)</td>
<td>Yes (9.0)</td>
<td>Yes (11.1)</td>
<td>Yes (5.0)</td>
<td>No</td>
</tr>
</tbody>
</table>
**HTML <title> Tag**

**Description**
The HTML `<title>` tag is used for indicating the title of the HTML document. The body title is placed between the `</head>` and the `</title>` tags. HTML document title is visible via browser’s title bar.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Title comes here</title>
</head>
<body>
<p>title tag is used for indicating the title of the HTML document. HTML document title is visible via browser’s title bar.</p>
</body>
</html>
```

This will produce the following result:

```
title tag is used for indicating the title of the HTML document. HTML document title is visible via browser’s title bar.
```

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML <tr> Tag**

**Description**
The HTML `<tr>` tag is used for specifying a table row within a table.

**Example**
This will produce the following result:

<table>
<thead>
<tr>
<th>Cricketers</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.S Dhoni</td>
<td>1</td>
</tr>
<tr>
<td>Yuvraj Singh</td>
<td>2</td>
</tr>
<tr>
<td>Virat Kohli</td>
<td>3</td>
</tr>
</tbody>
</table>

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#)
Specific Attributes

The HTML <tr> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>align</td>
<td>right, left, center, justify, justify, center, justify, center</td>
<td>Deprecated - Visual alignment.</td>
</tr>
<tr>
<td>bgcolor</td>
<td>rgb(x, x, x), #hexcode, colorname</td>
<td>Deprecated - Specifies the background color of the table cell.</td>
</tr>
<tr>
<td>char</td>
<td>character</td>
<td>Deprecated - Specifies which character to align text on. Used when align=&quot;char&quot;.</td>
</tr>
<tr>
<td>charoff</td>
<td>pixels or %</td>
<td>Deprecated - Specifies an alignment offset (either in pixels or percentage value) against the first character as specified with the char attribute. Used when align=&quot;char&quot;.</td>
</tr>
<tr>
<td>valign</td>
<td>top, middle, bottom, baseline</td>
<td>Deprecated - Vertical alignment.</td>
</tr>
</tbody>
</table>

Event Attributes

This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML <track> tag

Description
The HTML `<track>` tag is used for defining captions, subtitles, and other content for `<audio>` and `<video>` tags

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML source Tag</title>
</head>
<body>
<audio controls>
<source src="yourfile.mp3">
<track src="subtitles.vtt" kind="subtitles" srclang="en" label="English">
<p>The browser does not support the file</p>
</audio>
</body>
</html>
```

This will produce the following result:

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

**Specific Attributes**

The HTML `<track>` tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>default</td>
<td>default</td>
<td>uses the default track</td>
</tr>
<tr>
<td>kind</td>
<td>captions, chapters, descriptions, metadata, subtitles</td>
<td>kind of track to be used</td>
</tr>
<tr>
<td>label</td>
<td>text</td>
<td>displays title of text track</td>
</tr>
<tr>
<td>src</td>
<td>URL</td>
<td>URL of track file</td>
</tr>
</tbody>
</table>
Event Attributes
This tag supports all the event attributes described in - [HTML Events Reference](#).

Browser Support

<table>
<thead>
<tr>
<th>Browser</th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML `<tt>` Tag**

**Description**
The HTML `<tt>` tag specifies teletype text. *This is not supported in HTML5.*

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML tt Tag</title>
</head>
<body>
<p>tutorialspoint</p>
<tt>learning website</tt>
</body>
</html>
```

This will produce the following result:

```
tutorialspoint
learning website
```

**Global Attributes**
This tag supports all the global attributes described in - [HTML Attribute Reference](#).
Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#).

---

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

---

**HTML <u> Tag**

**Description**

The HTML `<u>` tag is used to underline a text. This tag is deprecated now and should not be used.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML u Tag</title>
</head>
<body>
<u>tutorialspoint.com</u> was started by <b>Mr. Mohammad Mohtashim</b>, in the year 2006.
</body>
</html>
```

This will produce the following result:

```
tutorialspoint.com was started by Mr. Mohammad Mohtashim, in the year 2006.
```

---

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#).

---

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#).
Browser Support

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML <ul> Tag**

**Description**
The HTML `<ul>` tag is used for creating an unordered list.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML ul Tag</title>
</head>
<body>
<p>Sports Club Games</p>
<ul>
<li>Cricket</li>
<li>Football</li>
<li>Hockey</li>
<li>Badminton</li>
<li>Squash</li>
</ul>
</body>
</html>
```

This will produce the following result:

Sports Club Games

- Cricket
- Football
- Hockey
- Badminton
- Squash

Global Attributes

This tag supports all the global attributes described in - HTML Attribute Reference

Specific Attributes

The HTML <ul> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>type</td>
<td>disc, circle, square</td>
<td>Deprecated-Specifies the style of the bullet.</td>
</tr>
<tr>
<td>compact</td>
<td>compact</td>
<td>Deprecated-Defines if compact rendering is required.</td>
</tr>
</tbody>
</table>

Event Attributes

This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML <var> Tag**

Description

The HTML <var> tag is used to format text in a document. It can include a variable in a mathematical expression.

Example

```xml
<!DOCTYPE html>
<html>

```
The equations: $3x - 7z = 8y + 2$ and $x + 3z = 4y + 9$

**Global Attributes**

This tag supports all the global attributes described in - [HTML Attribute Reference](#).

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#).

**Browser Support**

<table>
<thead>
<tr>
<th></th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML <video> Tag**

**Description**

The HTML `<video>` tag is used to embed video into your web page, it has several video sources.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML video Tag</title>
</head>
<body>
<p>Run your first program using an Online Compiler (compileonline.com)</p>
</body>
</html>
```
<video width="500" height="300" controls>
  <source src="/html/compileonline.mp4" type="video/mp4">
  This browser doesn't support video tag.
</video></body>
</html>

This will produce the following result:

Run your first program using an Online Compiler (compileonline.com)

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Specific Attributes
The HTML <video> tag also supports the following additional attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>autoplay</td>
<td>autoplay</td>
<td>Specifies that the video will play automatically.</td>
</tr>
<tr>
<td>controls</td>
<td>controls</td>
<td>Specifies that the video controls gets displayed.</td>
</tr>
<tr>
<td>height</td>
<td>pixels</td>
<td>Specifies the height</td>
</tr>
<tr>
<td>Attribute</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>loop</td>
<td>Specifies that the video will start again every time after finish</td>
<td></td>
</tr>
<tr>
<td>muted</td>
<td>Specifies that the audio should be muted</td>
<td></td>
</tr>
<tr>
<td>poster</td>
<td>Specifies the image to be shown while the video is downloading.</td>
<td></td>
</tr>
<tr>
<td>preload</td>
<td>Specifies what author thinks will lead to user experience at its best.</td>
<td></td>
</tr>
<tr>
<td>src</td>
<td>Specifies the URL</td>
<td></td>
</tr>
<tr>
<td>width</td>
<td>Specifies the width</td>
<td></td>
</tr>
</tbody>
</table>

**Event Attributes**

This tag supports all the event attributes described in - [HTML Events Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th>Browser</th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Mobile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**HTML <wbr> Tag**

**Description**

The HTML `<wbr>` tag defines a potential line break point if needed. This stands for Word Break Opportunity.

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML wbr Tag</title>
</head>
<body>
</body>
</html>
```
the browser to extend the document window beyond the size of the viewing pane and the poor user must scroll right

This will produce the following result:

The browser to extend the document window beyond the size of the viewing pane and the poor user must scroll right

Global Attributes
This tag supports all the global attributes described in - HTML Attribute Reference

Event Attributes
This tag supports all the event attributes described in - HTML Events Reference

Browser Support

<table>
<thead>
<tr>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

HTML <xmp> Tag

Description
The HTML <xmp> tag specifies preformatted text.

Example

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML xmp Tag</title>
</head>
<body>
<xmp>HTML tags include <b> for bold text, <i> for italic text.</xmp>
</body>
</html>
```
This will produce the following result:

HTML tags include

<b> for bold text</b>, <i> for italic text.</i>

**Global Attributes**

This tag supports all the global attributes described in- [HTML Attribute Reference](#)

**Browser Support**

<table>
<thead>
<tr>
<th>Browser</th>
<th>Chrome</th>
<th>Firefox</th>
<th>IE</th>
<th>Opera</th>
<th>Safari</th>
<th>Android</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
There are few HTML attributes which are standard and associated to all the HTML tags. These attributes are listed here with a brief description.

**Global Attributes**

Not valid in base, head, html, meta, param, script, style, and title elements.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>HTML-5</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>accesskey</td>
<td></td>
<td>Specifies a shortcut key for an element to be used in place of keyboard.</td>
</tr>
<tr>
<td>class</td>
<td></td>
<td>The class of the element</td>
</tr>
<tr>
<td>contenteditable</td>
<td>Yes</td>
<td>Boolean attribute to specify whether the element is editable or not.</td>
</tr>
<tr>
<td>contextmenu</td>
<td>Yes</td>
<td>Specifies a context menu for an element.</td>
</tr>
<tr>
<td>data-*</td>
<td>Yes</td>
<td>Used to store custom data associated with the element.</td>
</tr>
<tr>
<td>draggable</td>
<td>Yes</td>
<td>Boolean attribute to specify whether the element can be dragged or not.</td>
</tr>
<tr>
<td>dropzone</td>
<td>Yes</td>
<td>Specifies whether the dragged data is copied, moved, or linked, when dropped.</td>
</tr>
<tr>
<td>hidden</td>
<td>Yes</td>
<td>Specifies whether element should be visible or not.</td>
</tr>
<tr>
<td>id</td>
<td></td>
<td>A unique id for the element</td>
</tr>
<tr>
<td>spellcheck</td>
<td>Yes</td>
<td>Specifies if the element must have its spelling or grammar checked.</td>
</tr>
<tr>
<td>style</td>
<td></td>
<td>An inline style definition</td>
</tr>
<tr>
<td>tabindex</td>
<td></td>
<td>Specifies the tab order of an element.</td>
</tr>
<tr>
<td>Attribute</td>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>dir</td>
<td>ltr</td>
<td>rtl</td>
</tr>
<tr>
<td>lang</td>
<td>language_code</td>
<td>Sets the language code</td>
</tr>
</tbody>
</table>

Language Attributes

The **lang** attribute indicates the language being used for the enclosed content. The language is identified using the ISO standard language abbreviations, such as **fr** for French, **en** for English, and so on.

RFC 1766 (http://www.ietf.org/rfc/rfc1766.txt) describes these codes and their formats.

Not valid in base, br, frame, frameset, hr, iframe, param, and script elements.
When users visit your website, they do things like click various links, bring mouse over text and images etc. These are examples of what we call events in JavaScript and VBScript terminologies.

We can write our event handlers using JavaScript or VBScript and can specify some actions to be taken against these events. Though these are the events but they will be specified as attributes for the HTML tags.

The HTML 4.01 specification had defined 19 events but later HTML-5 has added many other events which we have listed down here:

**Window Events Attributes**

Following events have been introduced in older versions of HTML but all the tags marked with ⚖ are part of HTML-5.

<table>
<thead>
<tr>
<th>Events</th>
<th>HTML-5</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>onafterprint</td>
<td>⚖</td>
<td>Triggers after a document is printed</td>
</tr>
<tr>
<td>onbeforeprint</td>
<td>⚖</td>
<td>Triggers before a document is printed</td>
</tr>
<tr>
<td>onbeforeonload</td>
<td>⚖</td>
<td>Triggers before a document loads</td>
</tr>
<tr>
<td>onerror</td>
<td>⚖</td>
<td>Triggers when an error occurs</td>
</tr>
<tr>
<td>onhaschange</td>
<td>⚖</td>
<td>Triggers when a document has changed</td>
</tr>
<tr>
<td>onload</td>
<td></td>
<td>Triggers when a document loads</td>
</tr>
<tr>
<td>onmessage</td>
<td>⚖</td>
<td>Triggers when a message is triggered</td>
</tr>
<tr>
<td>onoffline</td>
<td>⚖</td>
<td>Triggers when a document goes offline</td>
</tr>
<tr>
<td>ononline</td>
<td>⚖</td>
<td>Triggers when a document comes online</td>
</tr>
<tr>
<td>onpagehide</td>
<td>⚖</td>
<td>Triggers when a window is hidden</td>
</tr>
</tbody>
</table>
### onpageshow
- Triggers when a window becomes visible

### onpopstate
- Triggers when a window's history changes

### onredo
- Triggers when a document performs a redo

### onresize
- Triggers when a window is resized

### onstorage
- Triggers when a document loads

### onundo
- Triggers when a document performs an undo

### onunload
- Triggers when a user leaves the document

---

### Form Events

Following tags have been introduced in older versions of HTML but all the tags marked with ✓ are part of HTML-5.

<table>
<thead>
<tr>
<th>Events</th>
<th>HTML-5</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>onblur</td>
<td></td>
<td>Triggers when a window loses focus</td>
</tr>
<tr>
<td>onchange</td>
<td></td>
<td>Triggers when an element changes</td>
</tr>
<tr>
<td>oncontextmenu</td>
<td>✓</td>
<td>Triggers when a context menu is triggered</td>
</tr>
<tr>
<td>onfocus</td>
<td></td>
<td>Triggers when a window gets focus</td>
</tr>
<tr>
<td>onformchange</td>
<td>✓</td>
<td>Triggers when a form changes</td>
</tr>
<tr>
<td>onforminput</td>
<td>✓</td>
<td>Triggers when a form gets user input</td>
</tr>
<tr>
<td>oninput</td>
<td>✓</td>
<td>Triggers when an element gets user input</td>
</tr>
<tr>
<td>oninvalid</td>
<td>✓</td>
<td>Triggers when an element is invalid</td>
</tr>
<tr>
<td>onreset</td>
<td></td>
<td>Triggers when a form is reset</td>
</tr>
</tbody>
</table>
## Keyboard Events

<table>
<thead>
<tr>
<th>Events</th>
<th>HTML-5</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>onkeydown</td>
<td></td>
<td>Triggers when a key is pressed</td>
</tr>
<tr>
<td>onkeypress</td>
<td></td>
<td>Triggers when a key is pressed and released</td>
</tr>
<tr>
<td>onkeyup</td>
<td></td>
<td>Triggers when a key is released</td>
</tr>
</tbody>
</table>

## Mouse Events

Following tags have been introduced in older versions of HTML but all the tags marked with 5 are part of HTML-5.

<table>
<thead>
<tr>
<th>Events</th>
<th>HTML-5</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>onclick</td>
<td></td>
<td>Triggers on a mouse click</td>
</tr>
<tr>
<td>ondblclick</td>
<td></td>
<td>Triggers on a mouse double-click</td>
</tr>
<tr>
<td>ondrag</td>
<td>5</td>
<td>Triggers when an element is dragged</td>
</tr>
<tr>
<td>ondragend</td>
<td>5</td>
<td>Triggers at the end of a drag operation</td>
</tr>
<tr>
<td>ondragenter</td>
<td>5</td>
<td>Triggers when an element has been dragged to a valid drop target</td>
</tr>
<tr>
<td>ondragleave</td>
<td>5</td>
<td>Triggers when an element leaves a valid drop target</td>
</tr>
<tr>
<td>ondragover</td>
<td>5</td>
<td>Triggers when an element is being dragged over a valid drop target</td>
</tr>
<tr>
<td>Event</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>ondragstart</td>
<td>Triggers at the start of a drag operation</td>
<td></td>
</tr>
<tr>
<td>ondrop</td>
<td>Triggers when a dragged element is being dropped</td>
<td></td>
</tr>
<tr>
<td>onmousedown</td>
<td>Triggers when a mouse button is pressed</td>
<td></td>
</tr>
<tr>
<td>onmousemove</td>
<td>Triggers when the mouse pointer moves</td>
<td></td>
</tr>
<tr>
<td>onmouseout</td>
<td>Triggers when the mouse pointer moves out of an element</td>
<td></td>
</tr>
<tr>
<td>onmouseover</td>
<td>Triggers when the mouse pointer moves over an element</td>
<td></td>
</tr>
<tr>
<td>onmouseup</td>
<td>Triggers when a mouse button is released</td>
<td></td>
</tr>
<tr>
<td>onmousemove</td>
<td>Triggers when the mouse wheel is being rotated</td>
<td></td>
</tr>
<tr>
<td>onscroll</td>
<td>Triggers when an element's scrollbar is being scrolled</td>
<td></td>
</tr>
</tbody>
</table>

### Media Events

Following tags have been introduced in older versions of HTML but all the tags marked with **are part of HTML-5.**

<table>
<thead>
<tr>
<th>Event</th>
<th>HTML-5</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>onabort</td>
<td></td>
<td>Triggers on an abort event</td>
</tr>
<tr>
<td>oncanplay</td>
<td>✅</td>
<td>Triggers when a media can start play, but might has to stop for buffering</td>
</tr>
<tr>
<td>oncanplaythrough</td>
<td>✅</td>
<td>Triggers when a media can be played to the end, without stopping for buffering</td>
</tr>
<tr>
<td>ondurationchange</td>
<td>✅</td>
<td>Triggers when the length of a media is changed</td>
</tr>
<tr>
<td>onemptied</td>
<td>✅</td>
<td>Triggers when a media resource element suddenly becomes empty.</td>
</tr>
<tr>
<td>onended</td>
<td>✅</td>
<td>Triggers when a media has reached the end</td>
</tr>
<tr>
<td>Event</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>onerror</td>
<td>Triggers when an error occurs</td>
<td></td>
</tr>
<tr>
<td>onloadeddata</td>
<td>Triggers when media data is loaded</td>
<td></td>
</tr>
<tr>
<td>onloadedmetadata</td>
<td>Triggers when the duration and other media data of a media element is loaded</td>
<td></td>
</tr>
<tr>
<td>onloadstart</td>
<td>Triggers when the browser starts loading the media data</td>
<td></td>
</tr>
<tr>
<td>onpause</td>
<td>Triggers when media data is paused</td>
<td></td>
</tr>
<tr>
<td>onplay</td>
<td>Triggers when media data is going to start playing</td>
<td></td>
</tr>
<tr>
<td>onplaying</td>
<td>Triggers when media data has started playing</td>
<td></td>
</tr>
<tr>
<td>onprogress</td>
<td>Triggers when the browser is fetching the media data</td>
<td></td>
</tr>
<tr>
<td>onratechange</td>
<td>Triggers when the playing rate of media data has changed</td>
<td></td>
</tr>
<tr>
<td>onreadystatechange</td>
<td>Triggers when the ready-state changes</td>
<td></td>
</tr>
<tr>
<td>onseeked</td>
<td>Triggers when the seeking attribute of a media element is no longer true, and the seeking has ended</td>
<td></td>
</tr>
<tr>
<td>Event</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------</td>
<td></td>
</tr>
<tr>
<td>onwaiting</td>
<td>Triggers when media has stopped playing, but is expected to resume</td>
<td></td>
</tr>
</tbody>
</table>
Fonts are specific to platform. You will have different look and feel of a web page on different machines running different operating systems like Windows, Linux or Mac iOS. Here we are giving a list of fonts which are available in various operating systems.

HTML <font> tag is deprecated in version 4.0 onwards and now all fonts are set by using CSS. Here is the simple syntax of setting font of a body of web page.

```
body { font-family: "new century schoolbook"; }
```

or

```
<body style="font-family:new century schoolbook;">
```

**Example**

```html
<!DOCTYPE html>
<html>
<head>
<title>Font Setting Using CSS</title>
</head>
<body>

<p>Change any of the style and try it.</p>
<div style="font-family:verdana;">This is demo for font family</div>
<br />
<div style="font-size:120%;">This is demo for font size</div>
<br />
<div style="font-size:14pt;">This is demo for font size</div>

</body>
</html>
```

This will produce the following result:

Change any of the style and try it.

This is demo for font family
This is demo for font size

This is demo for font size

### Fonts for Microsoft Systems

<table>
<thead>
<tr>
<th>Font</th>
<th>Font</th>
<th>Font</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andale Mono</td>
<td>Arial</td>
<td>Arial Bold</td>
</tr>
<tr>
<td>Arial Italic</td>
<td>Arial Bold Italic</td>
<td>Arial Black</td>
</tr>
<tr>
<td>Comic Sans MS</td>
<td>Comic Sans MS Bold</td>
<td>Courier New</td>
</tr>
<tr>
<td>Courier New Bold</td>
<td>Courier New Italic</td>
<td>Courier New Bold Italic</td>
</tr>
<tr>
<td>Georgia</td>
<td>Georgia Bold</td>
<td>Georgia Italic</td>
</tr>
<tr>
<td>Georgia Bold Italic</td>
<td>Impact</td>
<td>Lucida Console</td>
</tr>
<tr>
<td>Lucida Sans Unicode</td>
<td>Marlett</td>
<td>Minion Web</td>
</tr>
<tr>
<td>Symbol</td>
<td>Times New Roman</td>
<td>Times New Roman Bold</td>
</tr>
<tr>
<td>Times New Roman Italic</td>
<td>Times New Roman Bold Italic</td>
<td>Tahoma</td>
</tr>
<tr>
<td>Trebuchet MS</td>
<td>Trebuchet MS Bold</td>
<td>Trebuchet MS Italic</td>
</tr>
<tr>
<td>Trebuchet MS Bold Italic</td>
<td>Verdana</td>
<td>Verdana Bold</td>
</tr>
<tr>
<td>Verdana Italic</td>
<td>Verdana Bold Italic</td>
<td>Webdings</td>
</tr>
</tbody>
</table>

You can check example fonts here: [Microsoft Fonts Examples](http://www.microsoft.com/typography/fonts). You can also have more information on Microsoft Fonts at [http://www.microsoft.com/typography/fonts](http://www.microsoft.com/typography/fonts).
### Fonts for Macintosh Systems

Following is the list of fonts supported by Macintosh System 7 and higher versions

<table>
<thead>
<tr>
<th>Font</th>
<th>Font</th>
<th>Font</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Typewriter</td>
<td>Andale Mono</td>
<td>Apple Chancery</td>
</tr>
<tr>
<td>Arial</td>
<td>Arial Black</td>
<td>Brush Script</td>
</tr>
<tr>
<td>Baskerville</td>
<td>Big Caslon</td>
<td>Comic Sans MS</td>
</tr>
<tr>
<td>Copperplate</td>
<td>Courier New</td>
<td>Gill Sans</td>
</tr>
<tr>
<td>Futura</td>
<td>Herculaneum</td>
<td>Impact</td>
</tr>
<tr>
<td>Lucida Grande</td>
<td>Marker Felt</td>
<td>Optima</td>
</tr>
<tr>
<td>Trebuchet MS</td>
<td>Verdana</td>
<td>Webdings</td>
</tr>
<tr>
<td>Palatino</td>
<td>Symbol</td>
<td>Times</td>
</tr>
<tr>
<td>Osaka</td>
<td>Papyrus</td>
<td>Times New Roman</td>
</tr>
<tr>
<td>Textile</td>
<td>Zapf Dingbats</td>
<td>Zapfino</td>
</tr>
<tr>
<td>Techno</td>
<td>Hoefler Text</td>
<td>Skia</td>
</tr>
<tr>
<td>Hoefler Text Ornaments</td>
<td>Capitals</td>
<td>Charcoal</td>
</tr>
<tr>
<td>Gadget</td>
<td>Sand</td>
<td></td>
</tr>
</tbody>
</table>

You can check example fonts here: [Mac Fonts Examples](#)
Fonts for Unix Systems

Following is the list of fonts supported by most Unix System variants

<table>
<thead>
<tr>
<th>Font</th>
<th>Font</th>
<th>Font</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charter</td>
<td>Clean</td>
<td>Courier</td>
</tr>
<tr>
<td>Fixed</td>
<td>Helvetica</td>
<td>Lucida</td>
</tr>
<tr>
<td>Lucida bright</td>
<td>Lucida Typewriter</td>
<td>New Century Schoolbook</td>
</tr>
<tr>
<td>Symbol</td>
<td>Terminal</td>
<td>Times</td>
</tr>
<tr>
<td>Utopia</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

You can check example fonts here: [Unix Fonts Examples](#)

HTML ASCII Codes

There are $2^7 = 128$ printable characters which can be represented by different 7-BIT ASCII codes. Another set of characters are not for HTML representation but they are devised to control hardware.

Following tables list down all the 7-BIT ASCII codes and their equivalent HTML Entity Codes.

If you want to see equivalent HEX, OCT and extended set of ASCII codes then check next chapter.

7-BIT Printable ASCII Characters

<table>
<thead>
<tr>
<th>ASCII Characters</th>
<th>Description</th>
<th>HTML Entity Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>space</td>
<td></td>
<td> </td>
</tr>
<tr>
<td>!</td>
<td>exclamation mark</td>
<td>!</td>
</tr>
<tr>
<td>&quot;</td>
<td>quotation mark</td>
<td>&quot;</td>
</tr>
<tr>
<td>#</td>
<td>number sign</td>
<td>#</td>
</tr>
<tr>
<td>$</td>
<td>dollar sign</td>
<td>$</td>
</tr>
<tr>
<td>%</td>
<td>percent sign</td>
<td>%</td>
</tr>
<tr>
<td>&amp;</td>
<td>ampersand</td>
<td>&amp;</td>
</tr>
<tr>
<td>Character</td>
<td>Description</td>
<td>HTML Entity</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------</td>
<td>---------------</td>
</tr>
<tr>
<td><code>'</code></td>
<td>apostrophe</td>
<td><code>&amp;#39;</code></td>
</tr>
<tr>
<td><code>(</code></td>
<td>left parenthesis</td>
<td><code>&amp;#40;</code></td>
</tr>
<tr>
<td><code>)</code></td>
<td>right parenthesis</td>
<td><code>&amp;#41;</code></td>
</tr>
<tr>
<td><code>*</code></td>
<td>asterisk</td>
<td><code>&amp;#42;</code></td>
</tr>
<tr>
<td><code>+</code></td>
<td>plus sign</td>
<td><code>&amp;#43;</code></td>
</tr>
<tr>
<td><code>,</code></td>
<td>comma</td>
<td><code>&amp;#44;</code></td>
</tr>
<tr>
<td><code>-</code></td>
<td>hyphen</td>
<td><code>&amp;#45;</code></td>
</tr>
<tr>
<td><code>.</code></td>
<td>period</td>
<td><code>&amp;#46;</code></td>
</tr>
<tr>
<td><code>/</code></td>
<td>slash</td>
<td><code>&amp;#47;</code></td>
</tr>
<tr>
<td><code>0</code></td>
<td>digit 0</td>
<td><code>&amp;#48;</code></td>
</tr>
<tr>
<td><code>1</code></td>
<td>digit 1</td>
<td><code>&amp;#49;</code></td>
</tr>
<tr>
<td><code>2</code></td>
<td>digit 2</td>
<td><code>&amp;#50;</code></td>
</tr>
<tr>
<td><code>3</code></td>
<td>digit 3</td>
<td><code>&amp;#51;</code></td>
</tr>
<tr>
<td><code>4</code></td>
<td>digit 4</td>
<td><code>&amp;#52;</code></td>
</tr>
<tr>
<td><code>5</code></td>
<td>digit 5</td>
<td><code>&amp;#53;</code></td>
</tr>
<tr>
<td><code>6</code></td>
<td>digit 6</td>
<td><code>&amp;#54;</code></td>
</tr>
<tr>
<td><code>7</code></td>
<td>digit 7</td>
<td><code>&amp;#55;</code></td>
</tr>
<tr>
<td><code>8</code></td>
<td>digit 8</td>
<td><code>&amp;#56;</code></td>
</tr>
<tr>
<td><code>9</code></td>
<td>digit 9</td>
<td><code>&amp;#57;</code></td>
</tr>
<tr>
<td><code>:</code></td>
<td>colon</td>
<td><code>&amp;#58;</code></td>
</tr>
<tr>
<td><code>;</code></td>
<td>semicolon</td>
<td><code>&amp;#59;</code></td>
</tr>
<tr>
<td><code>&lt;</code></td>
<td>less-than</td>
<td><code>&amp;#60;</code></td>
</tr>
<tr>
<td><code>=</code></td>
<td>equals-to</td>
<td><code>&amp;#61;</code></td>
</tr>
<tr>
<td>&gt;</td>
<td>greater-than</td>
<td>&amp;#62;</td>
</tr>
<tr>
<td>-------</td>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td>?</td>
<td>question mark</td>
<td>&amp;#63;</td>
</tr>
<tr>
<td>@</td>
<td>at sign</td>
<td>&amp;#64;</td>
</tr>
<tr>
<td>A</td>
<td>uppercase A</td>
<td>&amp;#65;</td>
</tr>
<tr>
<td>B</td>
<td>uppercase B</td>
<td>&amp;#66;</td>
</tr>
<tr>
<td>C</td>
<td>uppercase C</td>
<td>&amp;#67;</td>
</tr>
<tr>
<td>D</td>
<td>uppercase D</td>
<td>&amp;#68;</td>
</tr>
<tr>
<td>E</td>
<td>uppercase E</td>
<td>&amp;#69;</td>
</tr>
<tr>
<td>F</td>
<td>uppercase F</td>
<td>&amp;#70;</td>
</tr>
<tr>
<td>G</td>
<td>uppercase G</td>
<td>&amp;#71;</td>
</tr>
<tr>
<td>H</td>
<td>uppercase H</td>
<td>&amp;#72;</td>
</tr>
<tr>
<td>I</td>
<td>uppercase I</td>
<td>&amp;#73;</td>
</tr>
<tr>
<td>J</td>
<td>uppercase J</td>
<td>&amp;#74;</td>
</tr>
<tr>
<td>K</td>
<td>uppercase K</td>
<td>&amp;#75;</td>
</tr>
<tr>
<td>L</td>
<td>uppercase L</td>
<td>&amp;#76;</td>
</tr>
<tr>
<td>M</td>
<td>uppercase M</td>
<td>&amp;#77;</td>
</tr>
<tr>
<td>N</td>
<td>uppercase N</td>
<td>&amp;#78;</td>
</tr>
<tr>
<td>O</td>
<td>uppercase O</td>
<td>&amp;#79;</td>
</tr>
<tr>
<td>P</td>
<td>uppercase P</td>
<td>&amp;#80;</td>
</tr>
<tr>
<td>Q</td>
<td>uppercase Q</td>
<td>&amp;#81;</td>
</tr>
<tr>
<td>R</td>
<td>uppercase R</td>
<td>&amp;#82;</td>
</tr>
<tr>
<td>S</td>
<td>uppercase S</td>
<td>&amp;#83;</td>
</tr>
<tr>
<td>T</td>
<td>uppercase T</td>
<td>&amp;#84;</td>
</tr>
<tr>
<td>U</td>
<td>uppercase U</td>
<td>&amp; #85;</td>
</tr>
<tr>
<td>---</td>
<td>-------------</td>
<td>--------</td>
</tr>
<tr>
<td>V</td>
<td>uppercase V</td>
<td>&amp; #86;</td>
</tr>
<tr>
<td>W</td>
<td>uppercase W</td>
<td>&amp; #87;</td>
</tr>
<tr>
<td>X</td>
<td>uppercase X</td>
<td>&amp; #88;</td>
</tr>
<tr>
<td>Y</td>
<td>uppercase Y</td>
<td>&amp; #89;</td>
</tr>
<tr>
<td>Z</td>
<td>uppercase Z</td>
<td>&amp; #90;</td>
</tr>
<tr>
<td>[</td>
<td>left square bracket</td>
<td>&amp; #91;</td>
</tr>
<tr>
<td>\</td>
<td>backslash</td>
<td>&amp; #92;</td>
</tr>
<tr>
<td>]</td>
<td>right square bracket</td>
<td>&amp; #93;</td>
</tr>
<tr>
<td>^</td>
<td>caret</td>
<td>&amp; #94;</td>
</tr>
<tr>
<td>_</td>
<td>underscore</td>
<td>&amp; #95;</td>
</tr>
<tr>
<td>`</td>
<td>grave accent</td>
<td>&amp; #96;</td>
</tr>
<tr>
<td>a</td>
<td>lowercase a</td>
<td>&amp; #97;</td>
</tr>
<tr>
<td>b</td>
<td>lowercase b</td>
<td>&amp; #98;</td>
</tr>
<tr>
<td>c</td>
<td>lowercase c</td>
<td>&amp; #99;</td>
</tr>
<tr>
<td>d</td>
<td>lowercase d</td>
<td>&amp; #100;</td>
</tr>
<tr>
<td>e</td>
<td>lowercase e</td>
<td>&amp; #101;</td>
</tr>
<tr>
<td>f</td>
<td>lowercase f</td>
<td>&amp; #102;</td>
</tr>
<tr>
<td>g</td>
<td>lowercase g</td>
<td>&amp; #103;</td>
</tr>
<tr>
<td>h</td>
<td>lowercase h</td>
<td>&amp; #104;</td>
</tr>
<tr>
<td>i</td>
<td>lowercase i</td>
<td>&amp; #105;</td>
</tr>
<tr>
<td>j</td>
<td>lowercase j</td>
<td>&amp; #106;</td>
</tr>
<tr>
<td>k</td>
<td>lowercase k</td>
<td>&amp; #107;</td>
</tr>
<tr>
<td>HTML Entity Codes</td>
<td>ASCII Characters</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>&amp;#00;</td>
<td>NUL</td>
<td>null character</td>
</tr>
<tr>
<td>&amp;#08;</td>
<td>L</td>
<td>lowercase l</td>
</tr>
<tr>
<td>&amp;#09;</td>
<td>M</td>
<td>lowercase m</td>
</tr>
<tr>
<td>&amp;#10;</td>
<td>N</td>
<td>lowercase n</td>
</tr>
<tr>
<td>&amp;#11;</td>
<td>O</td>
<td>lowercase o</td>
</tr>
<tr>
<td>&amp;#12;</td>
<td>P</td>
<td>lowercase p</td>
</tr>
<tr>
<td>&amp;#13;</td>
<td>Q</td>
<td>lowercase q</td>
</tr>
<tr>
<td>&amp;#14;</td>
<td>R</td>
<td>lowercase r</td>
</tr>
<tr>
<td>&amp;#15;</td>
<td>S</td>
<td>lowercase s</td>
</tr>
<tr>
<td>&amp;#16;</td>
<td>T</td>
<td>lowercase t</td>
</tr>
<tr>
<td>&amp;#17;</td>
<td>U</td>
<td>lowercase u</td>
</tr>
<tr>
<td>&amp;#18;</td>
<td>V</td>
<td>lowercase v</td>
</tr>
<tr>
<td>&amp;#19;</td>
<td>W</td>
<td>lowercase w</td>
</tr>
<tr>
<td>&amp;#20;</td>
<td>X</td>
<td>lowercase x</td>
</tr>
<tr>
<td>&amp;#21;</td>
<td>Y</td>
<td>lowercase y</td>
</tr>
<tr>
<td>&amp;#22;</td>
<td>Z</td>
<td>lowercase z</td>
</tr>
<tr>
<td>&amp;#123;</td>
<td>{</td>
<td>left curly brace</td>
</tr>
<tr>
<td>&amp;#124;</td>
<td></td>
<td>vertical bar</td>
</tr>
<tr>
<td>&amp;#125;</td>
<td>}</td>
<td>right curly brace</td>
</tr>
<tr>
<td>&amp;#126;</td>
<td>~</td>
<td>tilde</td>
</tr>
<tr>
<td>Character</td>
<td>Description</td>
<td>HTML</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>SOH</td>
<td>start of header</td>
<td>�</td>
</tr>
<tr>
<td>STX</td>
<td>start of text</td>
<td>�</td>
</tr>
<tr>
<td>ETX</td>
<td>end of text</td>
<td>�</td>
</tr>
<tr>
<td>EOT</td>
<td>end of transmission</td>
<td>�</td>
</tr>
<tr>
<td>ENQ</td>
<td>enquiry</td>
<td>�</td>
</tr>
<tr>
<td>ACK</td>
<td>acknowledge</td>
<td>�</td>
</tr>
<tr>
<td>BEL</td>
<td>bell (ring)</td>
<td>�</td>
</tr>
<tr>
<td>BS</td>
<td>backspace</td>
<td>�</td>
</tr>
<tr>
<td>HT</td>
<td>horizontal tab</td>
<td>	</td>
</tr>
<tr>
<td>LF</td>
<td>line feed</td>
<td>
</td>
</tr>
<tr>
<td>VT</td>
<td>vertical tab</td>
<td>�</td>
</tr>
<tr>
<td>FF</td>
<td>form feed</td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>carriage return</td>
<td></td>
</tr>
<tr>
<td>SO</td>
<td>shift out</td>
<td>�</td>
</tr>
<tr>
<td>SI</td>
<td>shift in</td>
<td>�</td>
</tr>
<tr>
<td>DLE</td>
<td>data link escape</td>
<td>�</td>
</tr>
<tr>
<td>DC1</td>
<td>device control 1</td>
<td>�</td>
</tr>
<tr>
<td>DC2</td>
<td>device control 2</td>
<td>�</td>
</tr>
<tr>
<td>Character</td>
<td>Description</td>
<td>ASCII Code</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>DC3</td>
<td>device control 3</td>
<td>�</td>
</tr>
<tr>
<td>DC4</td>
<td>device control 4</td>
<td>�</td>
</tr>
<tr>
<td>NAK</td>
<td>negative acknowledgment</td>
<td>�</td>
</tr>
<tr>
<td>SYN</td>
<td>synchronize</td>
<td>�</td>
</tr>
<tr>
<td>ETB</td>
<td>end transmission block</td>
<td>�</td>
</tr>
<tr>
<td>CAN</td>
<td>cancel</td>
<td>�</td>
</tr>
<tr>
<td>EM</td>
<td>end of medium</td>
<td>�</td>
</tr>
<tr>
<td>SUB</td>
<td>substitute</td>
<td>�</td>
</tr>
<tr>
<td>ESC</td>
<td>escape</td>
<td>�</td>
</tr>
<tr>
<td>FS</td>
<td>file separator</td>
<td>�</td>
</tr>
<tr>
<td>GS</td>
<td>group separator</td>
<td>�</td>
</tr>
<tr>
<td>RS</td>
<td>record separator</td>
<td>�</td>
</tr>
<tr>
<td>US</td>
<td>unit separator</td>
<td>�</td>
</tr>
<tr>
<td>DEL</td>
<td>delete (rubout)</td>
<td>�</td>
</tr>
</tbody>
</table>
ASCII stands for American Standard Code for Information Interchange. There are 128 standard ASCII codes, each of which can be represented by a 7-digit binary number: 0000000 through 1111111.

Extended ASCII adds an additional 128 characters that vary between computers, programs and fonts.

### 7 Bit ASCII Codes

<table>
<thead>
<tr>
<th>DEC</th>
<th>OCT</th>
<th>HEX</th>
<th>BIN</th>
<th>Symbol</th>
<th>HTML Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>00</td>
<td>00</td>
<td>00000000</td>
<td>NUL</td>
<td>�</td>
<td>Null char</td>
</tr>
<tr>
<td>1</td>
<td>00</td>
<td>01</td>
<td>00000001</td>
<td>SOH</td>
<td>�</td>
<td>Start of Heading</td>
</tr>
<tr>
<td>2</td>
<td>00</td>
<td>02</td>
<td>00000010</td>
<td>STX</td>
<td>�</td>
<td>Start of Text</td>
</tr>
<tr>
<td>3</td>
<td>00</td>
<td>03</td>
<td>00000011</td>
<td>ETX</td>
<td>�</td>
<td>End of Text</td>
</tr>
<tr>
<td>4</td>
<td>00</td>
<td>04</td>
<td>00000100</td>
<td>EOT</td>
<td>�</td>
<td>End of Transmission</td>
</tr>
<tr>
<td>5</td>
<td>00</td>
<td>05</td>
<td>00001010</td>
<td>ENQ</td>
<td>�</td>
<td>Enquiry</td>
</tr>
<tr>
<td>6</td>
<td>00</td>
<td>06</td>
<td>00010010</td>
<td>ACK</td>
<td>�</td>
<td>Acknowledgment</td>
</tr>
<tr>
<td>7</td>
<td>00</td>
<td>07</td>
<td>00010111</td>
<td>BEL</td>
<td>�</td>
<td>Bell</td>
</tr>
<tr>
<td>8</td>
<td>01</td>
<td>08</td>
<td>00100000</td>
<td>BS</td>
<td>�</td>
<td>Back Space</td>
</tr>
<tr>
<td>9</td>
<td>01</td>
<td>09</td>
<td>00100100</td>
<td>HT</td>
<td>	</td>
<td>Horizontal Tab</td>
</tr>
<tr>
<td>10</td>
<td>01</td>
<td>0A</td>
<td>00101000</td>
<td>LF</td>
<td>
</td>
<td>Line Feed</td>
</tr>
<tr>
<td>11</td>
<td>01</td>
<td>0B</td>
<td>00101111</td>
<td>VT</td>
<td>�</td>
<td>Vertical Tab</td>
</tr>
<tr>
<td>12</td>
<td>01</td>
<td>0C</td>
<td>01000000</td>
<td>FF</td>
<td></td>
<td>Form Feed</td>
</tr>
<tr>
<td>13</td>
<td>01</td>
<td>0D</td>
<td>01000100</td>
<td>CR</td>
<td></td>
<td>Carriage Return</td>
</tr>
<tr>
<td>14</td>
<td>01</td>
<td>0E</td>
<td>01000110</td>
<td>SO</td>
<td>�</td>
<td>Shift Out / X-On</td>
</tr>
<tr>
<td>15</td>
<td>01</td>
<td>0F</td>
<td>10000111</td>
<td>SI</td>
<td>�</td>
<td>Shift In / X-Off</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>020</td>
<td>10</td>
<td>00010000</td>
<td>DLE</td>
<td>&gt;#016;</td>
<td>Data Line Escape</td>
</tr>
<tr>
<td>17</td>
<td>021</td>
<td>11</td>
<td>00010001</td>
<td>DC1</td>
<td>&gt;#017;</td>
<td>Device Control 1 (oft. XON)</td>
</tr>
<tr>
<td>18</td>
<td>022</td>
<td>12</td>
<td>00010010</td>
<td>DC2</td>
<td>&gt;#018;</td>
<td>Device Control 2</td>
</tr>
<tr>
<td>19</td>
<td>023</td>
<td>13</td>
<td>00010011</td>
<td>DC3</td>
<td>&gt;#019;</td>
<td>Device Control 3 (oft. XOFF)</td>
</tr>
<tr>
<td>20</td>
<td>024</td>
<td>14</td>
<td>00010100</td>
<td>DC4</td>
<td>&gt;#020;</td>
<td>Device Control 4</td>
</tr>
<tr>
<td>21</td>
<td>025</td>
<td>15</td>
<td>00010101</td>
<td>NAK</td>
<td>&gt;#021;</td>
<td>Negative Acknowledgement</td>
</tr>
<tr>
<td>22</td>
<td>026</td>
<td>16</td>
<td>00010110</td>
<td>SYN</td>
<td>&gt;#022;</td>
<td>Synchronous Idle</td>
</tr>
<tr>
<td>23</td>
<td>027</td>
<td>17</td>
<td>00010111</td>
<td>ETB</td>
<td>&gt;#023;</td>
<td>End of Transmit Block</td>
</tr>
<tr>
<td>24</td>
<td>030</td>
<td>18</td>
<td>00011000</td>
<td>CAN</td>
<td>&gt;#024;</td>
<td>Cancel</td>
</tr>
<tr>
<td>25</td>
<td>031</td>
<td>19</td>
<td>00011001</td>
<td>EM</td>
<td>&gt;#025;</td>
<td>End of Medium</td>
</tr>
<tr>
<td>26</td>
<td>032</td>
<td>1A</td>
<td>00011010</td>
<td>SUB</td>
<td>&gt;#026;</td>
<td>Substitute</td>
</tr>
<tr>
<td>27</td>
<td>033</td>
<td>1B</td>
<td>00011011</td>
<td>ESC</td>
<td>&gt;#027;</td>
<td>Escape</td>
</tr>
<tr>
<td>28</td>
<td>034</td>
<td>1C</td>
<td>00011100</td>
<td>FS</td>
<td>&gt;#028;</td>
<td>File Separator</td>
</tr>
<tr>
<td>29</td>
<td>035</td>
<td>1D</td>
<td>00011101</td>
<td>GS</td>
<td>&gt;#029;</td>
<td>Group Separator</td>
</tr>
<tr>
<td>30</td>
<td>036</td>
<td>1E</td>
<td>00011110</td>
<td>RS</td>
<td>&gt;#030;</td>
<td>Record Separator</td>
</tr>
<tr>
<td>31</td>
<td>037</td>
<td>1F</td>
<td>00011111</td>
<td>US</td>
<td>&gt;#031;</td>
<td>Unit Separator</td>
</tr>
<tr>
<td>32</td>
<td>040</td>
<td>20</td>
<td>00100000</td>
<td></td>
<td>&gt;#32;</td>
<td>Space</td>
</tr>
<tr>
<td>33</td>
<td>041</td>
<td>21</td>
<td>00100001</td>
<td>!</td>
<td>&gt;#33;</td>
<td>Exclamation mark</td>
</tr>
<tr>
<td>34</td>
<td>042</td>
<td>22</td>
<td>00100010</td>
<td>&quot;</td>
<td>&gt;#34;</td>
<td>Double quotes</td>
</tr>
<tr>
<td>35</td>
<td>043</td>
<td>23</td>
<td>00100011</td>
<td>#</td>
<td>&gt;#35;</td>
<td>Number</td>
</tr>
<tr>
<td>36</td>
<td>044</td>
<td>24</td>
<td>00100100</td>
<td>$</td>
<td>&gt;#36;</td>
<td>Dollar</td>
</tr>
<tr>
<td>37</td>
<td>045</td>
<td>25</td>
<td>00100101</td>
<td>%</td>
<td>&gt;#37;</td>
<td>Procenttecken</td>
</tr>
<tr>
<td>38</td>
<td>046</td>
<td>26</td>
<td>00100110</td>
<td>&amp;</td>
<td>&gt;#38;</td>
<td>Ampersand</td>
</tr>
<tr>
<td>Hex</td>
<td>Dec</td>
<td>Oct</td>
<td>Binary</td>
<td>ASCII</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>--------</td>
<td>--------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>47</td>
<td>27</td>
<td>00100111</td>
<td>'</td>
<td>Single quote</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>50</td>
<td>28</td>
<td>00101000</td>
<td>(</td>
<td>Open parenthesis</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>51</td>
<td>29</td>
<td>00101001</td>
<td>)</td>
<td>Close parenthesis</td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>52</td>
<td>2A</td>
<td>00101010</td>
<td>*</td>
<td>Asterisk</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>53</td>
<td>2B</td>
<td>00101011</td>
<td>+</td>
<td>Plus</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>54</td>
<td>2C</td>
<td>00101100</td>
<td>,</td>
<td>Comma</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>55</td>
<td>2D</td>
<td>00101101</td>
<td>-</td>
<td>Hyphen</td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>56</td>
<td>2E</td>
<td>00101110</td>
<td>.</td>
<td>Period, dot or full stop</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>57</td>
<td>2F</td>
<td>00101111</td>
<td>/</td>
<td>Slash or divide</td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>60</td>
<td>30</td>
<td>00110000</td>
<td>0</td>
<td>Zero</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>61</td>
<td>31</td>
<td>00110001</td>
<td>1</td>
<td>One</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>62</td>
<td>32</td>
<td>00110010</td>
<td>2</td>
<td>Two</td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>63</td>
<td>33</td>
<td>00110011</td>
<td>3</td>
<td>Three</td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>64</td>
<td>34</td>
<td>00110100</td>
<td>4</td>
<td>Four</td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>65</td>
<td>35</td>
<td>00110101</td>
<td>5</td>
<td>Five</td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>66</td>
<td>36</td>
<td>00110110</td>
<td>6</td>
<td>Six</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>67</td>
<td>37</td>
<td>00110111</td>
<td>7</td>
<td>Seven</td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>70</td>
<td>38</td>
<td>00111000</td>
<td>8</td>
<td>Eight</td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>71</td>
<td>39</td>
<td>00111001</td>
<td>9</td>
<td>Nine</td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>72</td>
<td>3A</td>
<td>00111010</td>
<td>:</td>
<td>Colon</td>
<td></td>
</tr>
<tr>
<td>59</td>
<td>73</td>
<td>3B</td>
<td>00111011</td>
<td>;</td>
<td>Semicolon</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>74</td>
<td>3C</td>
<td>00111100</td>
<td>&lt;</td>
<td>Less than</td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>75</td>
<td>3D</td>
<td>00111101</td>
<td>=</td>
<td>Equals</td>
<td></td>
</tr>
<tr>
<td>ASCII</td>
<td>Unicode</td>
<td>Hex</td>
<td>Binary</td>
<td>HTML</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>---------</td>
<td>-----</td>
<td>--------</td>
<td>------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>85</td>
<td>125</td>
<td>55</td>
<td>01010101</td>
<td>U</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>86</td>
<td>126</td>
<td>56</td>
<td>01010110</td>
<td>V</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>87</td>
<td>127</td>
<td>57</td>
<td>01010111</td>
<td>W</td>
<td>W</td>
<td></td>
</tr>
<tr>
<td>88</td>
<td>130</td>
<td>58</td>
<td>01011000</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>89</td>
<td>131</td>
<td>59</td>
<td>01011001</td>
<td>Y</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>132</td>
<td>5A</td>
<td>01011010</td>
<td>Z</td>
<td>Z</td>
<td></td>
</tr>
<tr>
<td>91</td>
<td>133</td>
<td>5B</td>
<td>01011011</td>
<td>[</td>
<td>[</td>
<td></td>
</tr>
<tr>
<td>92</td>
<td>134</td>
<td>5C</td>
<td>01011100</td>
<td>\</td>
<td>\</td>
<td></td>
</tr>
<tr>
<td>93</td>
<td>135</td>
<td>5D</td>
<td>01011101</td>
<td>]</td>
<td>]</td>
<td></td>
</tr>
<tr>
<td>94</td>
<td>136</td>
<td>5E</td>
<td>01011100</td>
<td>^</td>
<td>^</td>
<td></td>
</tr>
<tr>
<td>95</td>
<td>137</td>
<td>5F</td>
<td>01011111</td>
<td>_</td>
<td>_</td>
<td></td>
</tr>
<tr>
<td>96</td>
<td>140</td>
<td>60</td>
<td>01100000</td>
<td>`</td>
<td>`</td>
<td></td>
</tr>
<tr>
<td>97</td>
<td>141</td>
<td>61</td>
<td>01100001</td>
<td>a</td>
<td>a</td>
<td></td>
</tr>
<tr>
<td>98</td>
<td>142</td>
<td>62</td>
<td>01100010</td>
<td>b</td>
<td>b</td>
<td></td>
</tr>
<tr>
<td>99</td>
<td>143</td>
<td>63</td>
<td>01100011</td>
<td>c</td>
<td>c</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>144</td>
<td>64</td>
<td>01100100</td>
<td>d</td>
<td>d</td>
<td></td>
</tr>
<tr>
<td>101</td>
<td>145</td>
<td>65</td>
<td>01100101</td>
<td>e</td>
<td>e</td>
<td></td>
</tr>
<tr>
<td>102</td>
<td>146</td>
<td>66</td>
<td>01100110</td>
<td>f</td>
<td>f</td>
<td></td>
</tr>
<tr>
<td>103</td>
<td>147</td>
<td>67</td>
<td>01100111</td>
<td>g</td>
<td>g</td>
<td></td>
</tr>
<tr>
<td>104</td>
<td>150</td>
<td>68</td>
<td>01101000</td>
<td>h</td>
<td>h</td>
<td></td>
</tr>
<tr>
<td>105</td>
<td>151</td>
<td>69</td>
<td>01101001</td>
<td>i</td>
<td>i</td>
<td></td>
</tr>
<tr>
<td>106</td>
<td>152</td>
<td>6A</td>
<td>01101010</td>
<td>j</td>
<td>j</td>
<td></td>
</tr>
<tr>
<td>107</td>
<td>153</td>
<td>6B</td>
<td>01101011</td>
<td>k</td>
<td>k</td>
<td></td>
</tr>
<tr>
<td>Dec</td>
<td>Oct</td>
<td>Hex</td>
<td>Binary</td>
<td>Value</td>
<td>Symbol</td>
<td>Description</td>
</tr>
<tr>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>----------</td>
<td>-------</td>
<td>-------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>108</td>
<td>154</td>
<td>6C</td>
<td>01101100</td>
<td>l</td>
<td>l</td>
<td>Lowercase l</td>
</tr>
<tr>
<td>109</td>
<td>155</td>
<td>6D</td>
<td>01101101</td>
<td>m</td>
<td>m</td>
<td>Lowercase m</td>
</tr>
<tr>
<td>110</td>
<td>156</td>
<td>6E</td>
<td>01101110</td>
<td>n</td>
<td>n</td>
<td>Lowercase n</td>
</tr>
<tr>
<td>111</td>
<td>157</td>
<td>6F</td>
<td>01101111</td>
<td>o</td>
<td>o</td>
<td>Lowercase o</td>
</tr>
<tr>
<td>112</td>
<td>160</td>
<td>70</td>
<td>01110000</td>
<td>p</td>
<td>p</td>
<td>Lowercase p</td>
</tr>
<tr>
<td>113</td>
<td>161</td>
<td>71</td>
<td>01110001</td>
<td>q</td>
<td>q</td>
<td>Lowercase q</td>
</tr>
<tr>
<td>114</td>
<td>162</td>
<td>72</td>
<td>01110010</td>
<td>r</td>
<td>r</td>
<td>Lowercase r</td>
</tr>
<tr>
<td>115</td>
<td>163</td>
<td>73</td>
<td>01110011</td>
<td>s</td>
<td>s</td>
<td>Lowercase s</td>
</tr>
<tr>
<td>116</td>
<td>164</td>
<td>74</td>
<td>01110100</td>
<td>t</td>
<td>t</td>
<td>Lowercase t</td>
</tr>
<tr>
<td>117</td>
<td>165</td>
<td>75</td>
<td>01110101</td>
<td>u</td>
<td>u</td>
<td>Lowercase u</td>
</tr>
<tr>
<td>118</td>
<td>166</td>
<td>76</td>
<td>01110110</td>
<td>v</td>
<td>v</td>
<td>Lowercase v</td>
</tr>
<tr>
<td>119</td>
<td>167</td>
<td>77</td>
<td>01110111</td>
<td>w</td>
<td>w</td>
<td>Lowercase w</td>
</tr>
<tr>
<td>120</td>
<td>170</td>
<td>78</td>
<td>01111000</td>
<td>x</td>
<td>x</td>
<td>Lowercase x</td>
</tr>
<tr>
<td>121</td>
<td>171</td>
<td>79</td>
<td>01111001</td>
<td>y</td>
<td>y</td>
<td>Lowercase y</td>
</tr>
<tr>
<td>122</td>
<td>172</td>
<td>7A</td>
<td>01111010</td>
<td>z</td>
<td>z</td>
<td>Lowercase z</td>
</tr>
<tr>
<td>123</td>
<td>173</td>
<td>7B</td>
<td>01111011</td>
<td>{</td>
<td>{</td>
<td>Opening brace</td>
</tr>
<tr>
<td>124</td>
<td>174</td>
<td>7C</td>
<td>01111100</td>
<td></td>
<td></td>
<td>Vertical bar</td>
</tr>
<tr>
<td>125</td>
<td>175</td>
<td>7D</td>
<td>01111101</td>
<td></td>
<td></td>
<td>Closing brace</td>
</tr>
<tr>
<td>126</td>
<td>176</td>
<td>7E</td>
<td>01111110</td>
<td>~</td>
<td>~</td>
<td>Equivalency sign (tilde)</td>
</tr>
<tr>
<td>127</td>
<td>177</td>
<td>7F</td>
<td>01111111</td>
<td>&amp;</td>
<td>�</td>
<td>Delete</td>
</tr>
</tbody>
</table>

**Extended ASCII Codes**

Below is set of additional 128 Extended ASCII Codes according to ISO 8859-1, also called ISO Latin-1.
<table>
<thead>
<tr>
<th>DEC</th>
<th>OCT</th>
<th>HEX</th>
<th>BIN</th>
<th>Symbol</th>
<th>HTMLCode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>128</td>
<td>200</td>
<td>80</td>
<td>10000000</td>
<td>€</td>
<td>�</td>
<td>Euro sign</td>
</tr>
<tr>
<td>129</td>
<td>201</td>
<td>81</td>
<td>10000001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>130</td>
<td>202</td>
<td>82</td>
<td>10000010</td>
<td>‚</td>
<td>�</td>
<td>Single low-9 quotation mark</td>
</tr>
<tr>
<td>131</td>
<td>203</td>
<td>83</td>
<td>10000011</td>
<td>f</td>
<td>�</td>
<td>Latin small letter f with hook</td>
</tr>
<tr>
<td>132</td>
<td>204</td>
<td>84</td>
<td>10000100</td>
<td>“</td>
<td>�</td>
<td>Double low-9 quotation mark</td>
</tr>
<tr>
<td>133</td>
<td>205</td>
<td>85</td>
<td>10000101</td>
<td>…</td>
<td>�</td>
<td>Horizontal ellipsis</td>
</tr>
<tr>
<td>134</td>
<td>206</td>
<td>86</td>
<td>10000110</td>
<td>†</td>
<td>�</td>
<td>Dagger</td>
</tr>
<tr>
<td>135</td>
<td>207</td>
<td>87</td>
<td>10000111</td>
<td>‡</td>
<td>�</td>
<td>Double dagger</td>
</tr>
<tr>
<td>136</td>
<td>210</td>
<td>88</td>
<td>10001000</td>
<td>^</td>
<td>�</td>
<td>Modifier letter circumflex accent</td>
</tr>
<tr>
<td>137</td>
<td>211</td>
<td>89</td>
<td>10001001</td>
<td>‰</td>
<td>�</td>
<td>Per mille sign</td>
</tr>
<tr>
<td>138</td>
<td>212</td>
<td>8A</td>
<td>10001010</td>
<td>Š</td>
<td>�</td>
<td>Latin capital letter S with caron</td>
</tr>
<tr>
<td>139</td>
<td>213</td>
<td>8B</td>
<td>10001011</td>
<td>‹</td>
<td>�</td>
<td>Single left-pointing angle quotation</td>
</tr>
<tr>
<td>140</td>
<td>214</td>
<td>8C</td>
<td>10001100</td>
<td>Œ</td>
<td>�</td>
<td>Latin capital ligature OE</td>
</tr>
<tr>
<td>141</td>
<td>215</td>
<td>8D</td>
<td>10001101</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>142</td>
<td>216</td>
<td>8E</td>
<td>10001110</td>
<td>Ž</td>
<td>�</td>
<td>Latin capital letter Z with caron</td>
</tr>
<tr>
<td>143</td>
<td>217</td>
<td>8F</td>
<td>10001111</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>144</td>
<td>220</td>
<td>90</td>
<td>10010000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>145</td>
<td>221</td>
<td>91</td>
<td>10010001</td>
<td>‘</td>
<td>�</td>
<td>Left single quotation mark</td>
</tr>
<tr>
<td>146</td>
<td>222</td>
<td>92</td>
<td>10010010</td>
<td>’</td>
<td>�</td>
<td>Right single quotation mark</td>
</tr>
<tr>
<td>147</td>
<td>223</td>
<td>93</td>
<td>10010011</td>
<td>“</td>
<td>�</td>
<td>Left double quotation mark</td>
</tr>
<tr>
<td>148</td>
<td>224</td>
<td>94</td>
<td>10010100</td>
<td>”</td>
<td>�</td>
<td>Right double quotation mark</td>
</tr>
<tr>
<td>149</td>
<td>225</td>
<td>95</td>
<td>10010101</td>
<td>•</td>
<td>�</td>
<td>Bullet</td>
</tr>
<tr>
<td>Hex</td>
<td>Decimal</td>
<td>ASCII</td>
<td>HTML Entity</td>
<td>Character Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>---------</td>
<td>-------</td>
<td>-------------</td>
<td>-----------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>226</td>
<td>96</td>
<td>~</td>
<td>�</td>
<td>En dash</td>
<td></td>
</tr>
<tr>
<td>151</td>
<td>227</td>
<td>97</td>
<td>~</td>
<td>�</td>
<td>Em dash</td>
<td></td>
</tr>
<tr>
<td>152</td>
<td>230</td>
<td>98</td>
<td>~</td>
<td>�</td>
<td>Small tilde</td>
<td></td>
</tr>
<tr>
<td>153</td>
<td>231</td>
<td>99</td>
<td>™</td>
<td>�</td>
<td>Trade mark sign</td>
<td></td>
</tr>
<tr>
<td>154</td>
<td>232</td>
<td>9A</td>
<td>š</td>
<td>�</td>
<td>Latin small letter S with caron</td>
<td></td>
</tr>
<tr>
<td>155</td>
<td>233</td>
<td>9B</td>
<td>&gt;</td>
<td>�</td>
<td>Single right-pointing angle quotation mark</td>
<td></td>
</tr>
<tr>
<td>156</td>
<td>234</td>
<td>9C</td>
<td>œ</td>
<td>�</td>
<td>Latin small ligature oe</td>
<td></td>
</tr>
<tr>
<td>157</td>
<td>235</td>
<td>9D</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>158</td>
<td>236</td>
<td>9E</td>
<td>ž</td>
<td>�</td>
<td>Latin small letter z with caron</td>
<td></td>
</tr>
<tr>
<td>159</td>
<td>237</td>
<td>9F</td>
<td>Ŷ</td>
<td>�</td>
<td>Latin capital letter Y with diaeresis</td>
<td></td>
</tr>
<tr>
<td>160</td>
<td>240</td>
<td>A0</td>
<td></td>
<td> </td>
<td>Non-breaking space</td>
<td></td>
</tr>
<tr>
<td>161</td>
<td>241</td>
<td>A1</td>
<td>i</td>
<td>¡</td>
<td>Inverted exclamation mark</td>
<td></td>
</tr>
<tr>
<td>162</td>
<td>242</td>
<td>A2</td>
<td>£</td>
<td>¢</td>
<td>Cent sign</td>
<td></td>
</tr>
<tr>
<td>163</td>
<td>243</td>
<td>A3</td>
<td></td>
<td>£</td>
<td>Pound sign</td>
<td></td>
</tr>
<tr>
<td>164</td>
<td>244</td>
<td>A4</td>
<td>¥</td>
<td>¤</td>
<td>Yen sign</td>
<td></td>
</tr>
<tr>
<td>165</td>
<td>245</td>
<td>A5</td>
<td>¥</td>
<td>™</td>
<td>Trade mark sign</td>
<td></td>
</tr>
<tr>
<td>166</td>
<td>246</td>
<td>A6</td>
<td>¥</td>
<td>™</td>
<td>Trade mark sign</td>
<td></td>
</tr>
<tr>
<td>167</td>
<td>247</td>
<td>A7</td>
<td>₤</td>
<td>₤</td>
<td>Pipe, Broken vertical bar</td>
<td></td>
</tr>
<tr>
<td>168</td>
<td>250</td>
<td>A8</td>
<td>₤</td>
<td>₤</td>
<td>Pipe, Broken vertical bar</td>
<td></td>
</tr>
<tr>
<td>169</td>
<td>251</td>
<td>A9</td>
<td>₤</td>
<td>©</td>
<td>Copyright sign</td>
<td></td>
</tr>
<tr>
<td>170</td>
<td>252</td>
<td>AA</td>
<td>₤</td>
<td>₤</td>
<td>Pipe, Broken vertical bar</td>
<td></td>
</tr>
<tr>
<td>171</td>
<td>253</td>
<td>AB</td>
<td>¥</td>
<td>¥</td>
<td>Yen sign</td>
<td></td>
</tr>
<tr>
<td>172</td>
<td>254</td>
<td>AC</td>
<td>¥</td>
<td>¥</td>
<td>Yen sign</td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Value</td>
<td>Character</td>
<td>HTML</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
<td>-----------------</td>
<td>------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>196</td>
<td>304 C4</td>
<td>11000100 A</td>
<td>Ä</td>
<td>Latin capital letter A with diaeresis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>197</td>
<td>305 C5</td>
<td>11000101 Ä</td>
<td>Å</td>
<td>Latin capital letter A with ring above</td>
<td></td>
<td></td>
</tr>
<tr>
<td>198</td>
<td>306 C6</td>
<td>11000110 AE</td>
<td>Æ</td>
<td>Latin capital letter AE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>199</td>
<td>307 C7</td>
<td>11000111 Ç</td>
<td>Ç</td>
<td>Latin capital letter C with cedilla</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>310 C8</td>
<td>11001000 É</td>
<td>È</td>
<td>Latin capital letter E with grave</td>
<td></td>
<td></td>
</tr>
<tr>
<td>201</td>
<td>311 C9</td>
<td>11001001 É</td>
<td>É</td>
<td>Latin capital letter E with acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>202</td>
<td>312 CA</td>
<td>11001010 É</td>
<td>Ê</td>
<td>Latin capital letter E with circumflex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>203</td>
<td>313 CB</td>
<td>11001011 É</td>
<td>Ë</td>
<td>Latin capital letter E with diaeresis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>204</td>
<td>314 CC</td>
<td>11001100 İ</td>
<td>Ì</td>
<td>Latin capital letter I with grave</td>
<td></td>
<td></td>
</tr>
<tr>
<td>205</td>
<td>315 CD</td>
<td>11001101 İ</td>
<td>Í</td>
<td>Latin capital letter I with acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>206</td>
<td>316 CE</td>
<td>11001110 İ</td>
<td>Î</td>
<td>Latin capital letter I with circumflex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>207</td>
<td>317 CF</td>
<td>11001111 İ</td>
<td>Ï</td>
<td>Latin capital letter I with diaeresis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>208</td>
<td>320 D0</td>
<td>11010000 Đ</td>
<td>Ð</td>
<td>Latin capital letter ETH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>209</td>
<td>321 D1</td>
<td>11010001 Ñ</td>
<td>Ñ</td>
<td>Latin capital letter N with tilde</td>
<td></td>
<td></td>
</tr>
<tr>
<td>210</td>
<td>322 D2</td>
<td>11010010 Ò</td>
<td>Ò</td>
<td>Latin capital letter O with grave</td>
<td></td>
<td></td>
</tr>
<tr>
<td>211</td>
<td>323 D3</td>
<td>11010011 Ö</td>
<td>Ó</td>
<td>Latin capital letter O with acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>212</td>
<td>324 D4</td>
<td>11010100 Ö</td>
<td>Ô</td>
<td>Latin capital letter O with circumflex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>213</td>
<td>325 D5</td>
<td>11010101 Ö</td>
<td>Õ</td>
<td>Latin capital letter O with tilde</td>
<td></td>
<td></td>
</tr>
<tr>
<td>214</td>
<td>326 D6</td>
<td>11010110 Ö</td>
<td>Ö</td>
<td>Latin capital letter O with diaeresis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>215</td>
<td>327 D7</td>
<td>11010111 ×</td>
<td>×</td>
<td>Multiplication sign</td>
<td></td>
<td></td>
</tr>
<tr>
<td>216</td>
<td>330 D8</td>
<td>11011000 Ø</td>
<td>Ø</td>
<td>Latin capital letter O with slash</td>
<td></td>
<td></td>
</tr>
<tr>
<td>217</td>
<td>331 D9</td>
<td>11011001 Ú</td>
<td>Ù</td>
<td>Latin capital letter U with grave</td>
<td></td>
<td></td>
</tr>
<tr>
<td>218</td>
<td>332 DA</td>
<td>11011010 Ú</td>
<td>Ú</td>
<td>Latin capital letter U with acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Decimal</td>
<td>Latin symbol</td>
<td>Description</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>---------</td>
<td>-------------</td>
<td>------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>219</td>
<td>333 DB</td>
<td>Ū</td>
<td>Latin capital letter U with circumflex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>220</td>
<td>334 DC</td>
<td>Ū</td>
<td>Latin capital letter U with diaeresis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>221</td>
<td>335 DD</td>
<td>Ŷ</td>
<td>Latin capital letter Y with acute</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>222</td>
<td>336 DE</td>
<td>P</td>
<td>Latin capital letter THORN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>223</td>
<td>337 DF</td>
<td>ß</td>
<td>Latin small letter sharp s - ess-zed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>224</td>
<td>340 E0</td>
<td>à</td>
<td>Latin small letter a with grave</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>225</td>
<td>341 E1</td>
<td>á</td>
<td>Latin small letter a with acute</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>226</td>
<td>342 E2</td>
<td>å</td>
<td>Latin small letter a with circumflex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>227</td>
<td>343 E3</td>
<td>ä</td>
<td>Latin small letter a with tilde</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>228</td>
<td>344 E4</td>
<td>ä</td>
<td>Latin small letter a with diaeresis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>229</td>
<td>345 E5</td>
<td>â</td>
<td>Latin small letter a with ring above</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>230</td>
<td>346 E6</td>
<td>æ</td>
<td>Latin small letter ae</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>231</td>
<td>347 E7</td>
<td>č</td>
<td>Latin small letter c with cedilla</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>232</td>
<td>350 E8</td>
<td>è</td>
<td>Latin small letter e with grave</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>233</td>
<td>351 E9</td>
<td>é</td>
<td>Latin small letter e with acute</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>234</td>
<td>352 EA</td>
<td>è</td>
<td>Latin small letter e with circumflex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>235</td>
<td>353 EB</td>
<td>ì</td>
<td>Latin small letter e with diaeresis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>236</td>
<td>354 EC</td>
<td>ì</td>
<td>Latin small letter i with grave</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>237</td>
<td>355 ED</td>
<td>í</td>
<td>Latin small letter i with acute</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>238</td>
<td>356 EE</td>
<td>ï</td>
<td>Latin small letter i with circumflex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>239</td>
<td>357 EF</td>
<td>ï</td>
<td>Latin small letter i with diaeresis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>240</td>
<td>360 F0</td>
<td>ò</td>
<td>Latin small letter eth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>241</td>
<td>361 F1</td>
<td>ñ</td>
<td>Latin small letter n with tilde</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Code</td>
<td>Character</td>
<td>HTML</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>-----------</td>
<td>------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>242</td>
<td>362</td>
<td>F2</td>
<td>11110010 ( \bar{o} )</td>
<td>&amp;#242;</td>
<td>Latin small letter o with grave</td>
<td></td>
</tr>
<tr>
<td>243</td>
<td>363</td>
<td>F3</td>
<td>11110011 ( \acute{o} )</td>
<td>&amp;#243;</td>
<td>Latin small letter o with acute</td>
<td></td>
</tr>
<tr>
<td>244</td>
<td>364</td>
<td>F4</td>
<td>11110100 ( \breve{o} )</td>
<td>&amp;#244;</td>
<td>Latin small letter o with circumflex</td>
<td></td>
</tr>
<tr>
<td>245</td>
<td>365</td>
<td>F5</td>
<td>11110101 ( \tilde{o} )</td>
<td>&amp;#245;</td>
<td>Latin small letter o with tilde</td>
<td></td>
</tr>
<tr>
<td>246</td>
<td>366</td>
<td>F6</td>
<td>11110110 ( \check{o} )</td>
<td>&amp;#246;</td>
<td>Latin small letter o with diaeresis</td>
<td></td>
</tr>
<tr>
<td>247</td>
<td>367</td>
<td>F7</td>
<td>11110111 ( \div )</td>
<td>&amp;#247;</td>
<td>Division sign</td>
<td></td>
</tr>
<tr>
<td>248</td>
<td>370</td>
<td>F8</td>
<td>11111000 ( \varnothing )</td>
<td>&amp;#248;</td>
<td>Latin small letter o with slash</td>
<td></td>
</tr>
<tr>
<td>249</td>
<td>371</td>
<td>F9</td>
<td>11111001 ( \breve{u} )</td>
<td>&amp;#249;</td>
<td>Latin small letter u with grave</td>
<td></td>
</tr>
<tr>
<td>250</td>
<td>372</td>
<td>FA</td>
<td>11111010 ( \acute{u} )</td>
<td>&amp;#250;</td>
<td>Latin small letter u with acute</td>
<td></td>
</tr>
<tr>
<td>251</td>
<td>373</td>
<td>FB</td>
<td>11111011 ( \breve{u} )</td>
<td>&amp;#251;</td>
<td>Latin small letter u with circumflex</td>
<td></td>
</tr>
<tr>
<td>252</td>
<td>374</td>
<td>FC</td>
<td>11111100 ( \check{u} )</td>
<td>&amp;#252;</td>
<td>Latin small letter u with diaeresis</td>
<td></td>
</tr>
<tr>
<td>253</td>
<td>375</td>
<td>FD</td>
<td>11111101 ( \grave{y} )</td>
<td>&amp;#253;</td>
<td>Latin small letter y with acute</td>
<td></td>
</tr>
<tr>
<td>254</td>
<td>376</td>
<td>FE</td>
<td>11111110 ( \breve{p} )</td>
<td>&amp;#254;</td>
<td>Latin small letter thorn</td>
<td></td>
</tr>
<tr>
<td>255</td>
<td>377</td>
<td>FF</td>
<td>11111111 ( \grave{y} )</td>
<td>&amp;#255;</td>
<td>Latin small letter y with diaeresis</td>
<td></td>
</tr>
</tbody>
</table>
The following table shows the 16 color names that were introduced in HTML 3.2:

<table>
<thead>
<tr>
<th>Color Name</th>
<th>Hex Value</th>
<th>Color</th>
<th>Show</th>
</tr>
</thead>
<tbody>
<tr>
<td>aqua</td>
<td>#00ffff</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>black</td>
<td>#000000</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>blue</td>
<td>#0000ff</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>fuchsia</td>
<td>#ff00ff</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>green</td>
<td>#008000</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>gray</td>
<td>#808080</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>lime</td>
<td>#00ff00</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>maroon</td>
<td>#800000</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>navy</td>
<td>#000080</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>olive</td>
<td>#808000</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>purple</td>
<td>#800080</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>red</td>
<td>#ff0000</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>silver</td>
<td>#c0c0c0</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>teal</td>
<td>#008080</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>white</td>
<td>#ffffff</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>yellow</td>
<td>#ffff00</td>
<td>Demo</td>
<td></td>
</tr>
</tbody>
</table>

There are other colors which are not part of HTML or XHTML but they are supported by most of the versions of major browsers.
<table>
<thead>
<tr>
<th>Color Name</th>
<th>Hex Value</th>
<th>Color</th>
<th>Show</th>
</tr>
</thead>
<tbody>
<tr>
<td>alicebule</td>
<td>#f0f8ff</td>
<td></td>
<td>Demo</td>
</tr>
<tr>
<td>antiquewhite</td>
<td>#faebd7</td>
<td></td>
<td>Demo</td>
</tr>
<tr>
<td>aquamarine</td>
<td>#7fffdd</td>
<td></td>
<td>Demo</td>
</tr>
<tr>
<td>azure</td>
<td>#ffffff</td>
<td></td>
<td>Demo</td>
</tr>
<tr>
<td>beige</td>
<td>#f5f5dc</td>
<td></td>
<td>Demo</td>
</tr>
<tr>
<td>bisque</td>
<td>#ffe4c4</td>
<td></td>
<td>Demo</td>
</tr>
<tr>
<td>blanched Alanmond</td>
<td>#ffebebd</td>
<td></td>
<td>Demo</td>
</tr>
<tr>
<td>blueviolet</td>
<td>#8a2be2</td>
<td></td>
<td>Demo</td>
</tr>
<tr>
<td>brown</td>
<td>#a52a2a</td>
<td></td>
<td>Demo</td>
</tr>
<tr>
<td>burlywood</td>
<td>#deb887</td>
<td></td>
<td>Demo</td>
</tr>
<tr>
<td>cadetblue</td>
<td>#5f9ea0</td>
<td></td>
<td>Demo</td>
</tr>
<tr>
<td>chartreuse</td>
<td>#7fff00</td>
<td></td>
<td>Demo</td>
</tr>
<tr>
<td>chocolate</td>
<td>#d2691e</td>
<td></td>
<td>Demo</td>
</tr>
<tr>
<td>coral</td>
<td>#ff7f50</td>
<td></td>
<td>Demo</td>
</tr>
<tr>
<td>cornflowerblue</td>
<td>#6495ed</td>
<td></td>
<td>Demo</td>
</tr>
<tr>
<td>cornsilk</td>
<td>#fff8dc</td>
<td></td>
<td>Demo</td>
</tr>
<tr>
<td>crimson</td>
<td>#dc143c</td>
<td></td>
<td>Demo</td>
</tr>
<tr>
<td>cyan</td>
<td>#00ffffff</td>
<td></td>
<td>Demo</td>
</tr>
<tr>
<td>darkblue</td>
<td>#00008b</td>
<td></td>
<td>Demo</td>
</tr>
<tr>
<td>Color Name</td>
<td>Hex Code</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>----------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>darkcyan</td>
<td>#008b8b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>darkgoldenrod</td>
<td>#b8860b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>darkgray</td>
<td>#a9a9a9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>darkgreen</td>
<td>#006400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>darkkhaki</td>
<td>#bdb76b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>darkmagenta</td>
<td>#8b008b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>darkolivegreen</td>
<td>#556b2f</td>
<td></td>
<td></td>
</tr>
<tr>
<td>darkorange</td>
<td>#ff8c00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>darkorchid</td>
<td>#9932cc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>darkred</td>
<td>#8b0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>darksalmon</td>
<td>#e9967a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>darkseagreen</td>
<td>#8fbc8f</td>
<td></td>
<td></td>
</tr>
<tr>
<td>darkslateblue</td>
<td>#483d8b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>darkslategray</td>
<td>#2f4f4f</td>
<td></td>
<td></td>
</tr>
<tr>
<td>darkturquoise</td>
<td>#00ced1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>darkviolet</td>
<td>#9400d3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>deeppink</td>
<td>#ff1493</td>
<td></td>
<td></td>
</tr>
<tr>
<td>deepskyblue</td>
<td>#00bfff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dimgray</td>
<td>#696969</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dodgerblue</td>
<td>#1e90ff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Code</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>----------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>firebrick</td>
<td>#b22222</td>
<td></td>
<td></td>
</tr>
<tr>
<td>floralwhite</td>
<td>#fffaf0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>forestgreen</td>
<td>#228b22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>gainsboro</td>
<td>#dcdcdc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ghostwhite</td>
<td>#f8f8ff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>gold</td>
<td>#ffd700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>goldenrod</td>
<td>#daa520</td>
<td></td>
<td></td>
</tr>
<tr>
<td>gray</td>
<td>#808080</td>
<td></td>
<td></td>
</tr>
<tr>
<td>greenyellow</td>
<td>#adff2f</td>
<td></td>
<td></td>
</tr>
<tr>
<td>honeydew</td>
<td>#f0fff0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hotpink</td>
<td>#ff69b4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>indianred</td>
<td>#cd5c5c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>indigo</td>
<td>#4b0082</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ivory</td>
<td>#ffffff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>khaki</td>
<td>#f0e68c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lavender</td>
<td>#e6e6fa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lavenderblush</td>
<td>#fff0f5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lawngreen</td>
<td>#7cfc00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lemonchiffon</td>
<td>#ffaccd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lightblue</td>
<td>#add8e6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color Name</td>
<td>Hex Code</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>lightcoral</td>
<td>#f08080</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>lightcyan</td>
<td>#e0ffff</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>lightgoldenrodyellow</td>
<td>#fafad2</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>lightgreen</td>
<td>#90ee90</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>lightgrey</td>
<td>#d3d3d3</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>lightpink</td>
<td>#ffb6c1</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>lightsalmon</td>
<td>#ffa07a</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>lightseagreen</td>
<td>#20b2aa</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>lightskyblue</td>
<td>#87cefa</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>lightslategray</td>
<td>#778899</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>lightsteelblue</td>
<td>#b0c4de</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>lightyellow</td>
<td>#fffff0</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>limegreen</td>
<td>#32cd32</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>linen</td>
<td>#faf0e6</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>magenta</td>
<td>#ff00ff</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>mediumblue</td>
<td>#0000cd</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>mediumorchid</td>
<td>#ba55d3</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>mediumpurple</td>
<td>#9370db</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>midnightblue</td>
<td>#191970</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>mistyrose</td>
<td>#ffe4e1</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Hex Code</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>mocca</td>
<td>#ffe4b5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>oldlace</td>
<td>#fdf5e6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>orange</td>
<td>#ffa500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>orchid</td>
<td>#da70d6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>peachpuff</td>
<td>#ffdad9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>peru</td>
<td>#cd853f</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pink</td>
<td>#ffcc0b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>plum</td>
<td>#dda0dd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>purple</td>
<td>#800080</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rosybrown</td>
<td>#bc8f8f</td>
<td></td>
<td></td>
</tr>
<tr>
<td>royalblue</td>
<td>#4169e1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>salmon</td>
<td>#fa8072</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sandybrown</td>
<td>#f4a460</td>
<td></td>
<td></td>
</tr>
<tr>
<td>seagreen</td>
<td>#2e8b57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sienna</td>
<td>#a0522d</td>
<td></td>
<td></td>
</tr>
<tr>
<td>skyblue</td>
<td>#87ceeb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>slateblue</td>
<td>#6a5acd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>steelblue</td>
<td>#4682b4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tan</td>
<td>#d2b48c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>thistle</td>
<td>#d8bdf8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Hex Code</td>
<td>Demo</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>----------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>tomato</td>
<td>#ff6347</td>
<td></td>
<td></td>
</tr>
<tr>
<td>violet</td>
<td>#ee82ee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>wheat</td>
<td>#f5deb3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>whitesmoke</td>
<td>#f5f5f5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>yellow</td>
<td>#ffff00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>yellowgreen</td>
<td>#9acd32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Some characters are reserved in HTML and they have special meaning when used in HTML document. For example, you cannot use the greater than and less than signs or angle brackets within your HTML text because the browser will treat them differently and will try to draw a meaning related to HTML tag.

HTML processors must support following five special characters listed in the table that follows.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
<th>Entity Name</th>
<th>Number Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;</td>
<td>quotation mark</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>'</td>
<td>apostrophe</td>
<td>'</td>
<td>'</td>
</tr>
<tr>
<td>&amp;</td>
<td>ampersand</td>
<td>&amp;</td>
<td>&amp;</td>
</tr>
<tr>
<td>&lt;</td>
<td>less-than</td>
<td>&lt;</td>
<td>&lt;</td>
</tr>
<tr>
<td>&gt;</td>
<td>greater-than</td>
<td>&gt;</td>
<td>&gt;</td>
</tr>
</tbody>
</table>

**Example**

If you want to write `<div id="character">` as a code, then you will have to write as follows:

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML Entities</title>
</head>
<body>
&lt;div id=&quot;character&quot;&gt;
</body>
</html>
```

This will produce the following result:

```html
<div id="character">
```

There is also a long list of special characters in HTML 4.0. In order for these to appear in your document, you can use either the numerical codes or the entity names. For example, to insert a copyright symbol you can use either of the following:
## ISO 8859-1 Symbol Entities

<table>
<thead>
<tr>
<th>Result</th>
<th>Description</th>
<th>Entity Name</th>
<th>Number Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>non-breaking space</td>
<td> </td>
<td>&gt;160;</td>
</tr>
<tr>
<td>i</td>
<td>inverted exclamation mark</td>
<td>¡</td>
<td>&gt;161;</td>
</tr>
<tr>
<td>☢</td>
<td>currency</td>
<td>¤</td>
<td>&gt;164;</td>
</tr>
<tr>
<td>¢</td>
<td>cent</td>
<td>¢</td>
<td>&gt;162;</td>
</tr>
<tr>
<td>£</td>
<td>pound</td>
<td>£</td>
<td>&gt;163;</td>
</tr>
<tr>
<td>¥</td>
<td>yen</td>
<td>¥</td>
<td>&gt;165;</td>
</tr>
<tr>
<td>†</td>
<td>broken vertical bar</td>
<td>¦</td>
<td>&gt;166;</td>
</tr>
<tr>
<td>§</td>
<td>section</td>
<td>§</td>
<td>&gt;167;</td>
</tr>
<tr>
<td>&quot;</td>
<td>spacing diaeresis</td>
<td>¨</td>
<td>&gt;168;</td>
</tr>
<tr>
<td>©</td>
<td>copyright</td>
<td>©</td>
<td>&gt;169;</td>
</tr>
<tr>
<td>a</td>
<td>feminine ordinal indicator</td>
<td>ª</td>
<td>&gt;170;</td>
</tr>
<tr>
<td>«</td>
<td>angle quotation mark (left)</td>
<td>«</td>
<td>&gt;171;</td>
</tr>
<tr>
<td>¬</td>
<td>negation</td>
<td>¬</td>
<td>&gt;172;</td>
</tr>
<tr>
<td><em>SOFT-HYPHEN</em></td>
<td>soft hyphen</td>
<td>­</td>
<td>&gt;173;</td>
</tr>
<tr>
<td>®</td>
<td>registered trademark</td>
<td>®</td>
<td>&gt;174;</td>
</tr>
<tr>
<td>™</td>
<td>trademark</td>
<td>™</td>
<td>&gt;8482;</td>
</tr>
<tr>
<td>−</td>
<td>spacing macron</td>
<td>¯</td>
<td>&gt;175;</td>
</tr>
<tr>
<td>°</td>
<td>degree</td>
<td>°</td>
<td>&gt;176;</td>
</tr>
<tr>
<td>HTML</td>
<td>Result</td>
<td>Description</td>
<td>Entity Name</td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>±</td>
<td>plus-or-minus</td>
<td>±</td>
<td>±</td>
</tr>
<tr>
<td>²</td>
<td>superscript 2</td>
<td>²</td>
<td>²</td>
</tr>
<tr>
<td>³</td>
<td>superscript 3</td>
<td>³</td>
<td>³</td>
</tr>
<tr>
<td>′</td>
<td>spacing acute</td>
<td>´</td>
<td>´</td>
</tr>
<tr>
<td>µ</td>
<td>micro</td>
<td>µ</td>
<td>µ</td>
</tr>
<tr>
<td>¶</td>
<td>paragraph</td>
<td>¶</td>
<td>¶</td>
</tr>
<tr>
<td>·</td>
<td>middle dot</td>
<td>·</td>
<td>·</td>
</tr>
<tr>
<td>¸</td>
<td>spacing cedilla</td>
<td>¸</td>
<td>¸</td>
</tr>
<tr>
<td>¹</td>
<td>superscript 1</td>
<td>¹</td>
<td>¹</td>
</tr>
<tr>
<td>₀</td>
<td>masculine ordinal indicator</td>
<td>º</td>
<td>º</td>
</tr>
<tr>
<td>»</td>
<td>angle quotation mark (right)</td>
<td>»</td>
<td>»</td>
</tr>
<tr>
<td>¼</td>
<td>fraction 1/4</td>
<td>¼</td>
<td>¼</td>
</tr>
<tr>
<td>½</td>
<td>fraction 1/2</td>
<td>½</td>
<td>½</td>
</tr>
<tr>
<td>¾</td>
<td>fraction 3/4</td>
<td>¾</td>
<td>¾</td>
</tr>
<tr>
<td>¿</td>
<td>inverted question mark</td>
<td>¿</td>
<td>¿</td>
</tr>
<tr>
<td>×</td>
<td>multiplication</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>÷</td>
<td>division</td>
<td>÷</td>
<td>÷</td>
</tr>
</tbody>
</table>

**ISO 8859-1 Character Entities**

<table>
<thead>
<tr>
<th>Result</th>
<th>Description</th>
<th>Entity Name</th>
<th>Number Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Å</td>
<td>capital a, grave accent</td>
<td>À</td>
<td>À</td>
</tr>
<tr>
<td>Å</td>
<td>capital a, acute accent</td>
<td>Á</td>
<td>Á</td>
</tr>
<tr>
<td>Â</td>
<td>capital a, circumflex accent</td>
<td>Â</td>
<td>Â</td>
</tr>
<tr>
<td>Á</td>
<td>capital a, tilde</td>
<td>Ã</td>
<td>Ã</td>
</tr>
<tr>
<td>Unicode</td>
<td>Description</td>
<td>HTML</td>
<td>Decimal</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------</td>
<td>-------</td>
<td>---------</td>
</tr>
<tr>
<td>Ä</td>
<td>capital a, umlaut mark</td>
<td>Ü</td>
<td>&amp;196;</td>
</tr>
<tr>
<td>Å</td>
<td>capital a, ring</td>
<td>Å</td>
<td>&amp;197;</td>
</tr>
<tr>
<td>Æ</td>
<td>capital ae</td>
<td>Æ</td>
<td>&amp;198;</td>
</tr>
<tr>
<td>Ç</td>
<td>capital c, cedilla</td>
<td>Ç</td>
<td>&amp;199;</td>
</tr>
<tr>
<td>É</td>
<td>capital e, grave accent</td>
<td>È</td>
<td>&amp;200;</td>
</tr>
<tr>
<td>Ê</td>
<td>capital e, acute accent</td>
<td>É</td>
<td>&amp;201;</td>
</tr>
<tr>
<td>Ë</td>
<td>capital e, circumflex accent</td>
<td>Ê</td>
<td>&amp;202;</td>
</tr>
<tr>
<td>Ê</td>
<td>capital e, umlaut mark</td>
<td>Ë</td>
<td>&amp;203;</td>
</tr>
<tr>
<td>Í</td>
<td>capital i, grave accent</td>
<td>Ì</td>
<td>&amp;204;</td>
</tr>
<tr>
<td>Ì</td>
<td>capital i, acute accent</td>
<td>Í</td>
<td>&amp;205;</td>
</tr>
<tr>
<td>Í</td>
<td>capital i, circumflex accent</td>
<td>Î</td>
<td>&amp;206;</td>
</tr>
<tr>
<td>Ì</td>
<td>capital i, umlaut mark</td>
<td>Ï</td>
<td>&amp;207;</td>
</tr>
<tr>
<td>Ð</td>
<td>capital eth, Icelandic</td>
<td>Ð</td>
<td>&amp;208;</td>
</tr>
<tr>
<td>Ñ</td>
<td>capital n, tilde</td>
<td>Ñ</td>
<td>&amp;209;</td>
</tr>
<tr>
<td>Ò</td>
<td>capital o, grave accent</td>
<td>Ò</td>
<td>&amp;210;</td>
</tr>
<tr>
<td>Ó</td>
<td>capital o, acute accent</td>
<td>Ó</td>
<td>&amp;211;</td>
</tr>
<tr>
<td>Ô</td>
<td>capital o, circumflex accent</td>
<td>Ô</td>
<td>&amp;212;</td>
</tr>
<tr>
<td>Õ</td>
<td>capital o, tilde</td>
<td>Õ</td>
<td>&amp;213;</td>
</tr>
<tr>
<td>Ö</td>
<td>capital o, umlaut mark</td>
<td>Ö</td>
<td>&amp;214;</td>
</tr>
<tr>
<td>Ø</td>
<td>capital o, slash</td>
<td>Ø</td>
<td>&amp;216;</td>
</tr>
<tr>
<td>Ù</td>
<td>capital u, grave accent</td>
<td>Ù</td>
<td>&amp;217;</td>
</tr>
<tr>
<td>Û</td>
<td>capital u, acute accent</td>
<td>Ú</td>
<td>&amp;218;</td>
</tr>
<tr>
<td>Û</td>
<td>capital u, circumflex accent</td>
<td>Û</td>
<td>&amp;219;</td>
</tr>
<tr>
<td>Character</td>
<td>Description</td>
<td>HTML Entity</td>
<td>Decimal Code</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td>-------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Ü</td>
<td>capital u, umlaut mark</td>
<td>Ü</td>
<td>Ü</td>
</tr>
<tr>
<td>Ý</td>
<td>capital y, acute accent</td>
<td>Ý</td>
<td>Ý</td>
</tr>
<tr>
<td>þ</td>
<td>capital THORN, Icelandic</td>
<td>Þ</td>
<td>Þ</td>
</tr>
<tr>
<td>ß</td>
<td>small sharp s, German</td>
<td>ß</td>
<td>ß</td>
</tr>
<tr>
<td>à</td>
<td>small a, grave accent</td>
<td>à</td>
<td>à</td>
</tr>
<tr>
<td>á</td>
<td>small a, acute accent</td>
<td>á</td>
<td>á</td>
</tr>
<tr>
<td>â</td>
<td>small a, circumflex accent</td>
<td>â</td>
<td>â</td>
</tr>
<tr>
<td>ä</td>
<td>small a, tilde</td>
<td>ã</td>
<td>ã</td>
</tr>
<tr>
<td>ä</td>
<td>small a, umlaut mark</td>
<td>ä</td>
<td>ä</td>
</tr>
<tr>
<td>â</td>
<td>small a, ring</td>
<td>å</td>
<td>å</td>
</tr>
<tr>
<td>æ</td>
<td>small ae</td>
<td>æ</td>
<td>æ</td>
</tr>
<tr>
<td>ç</td>
<td>small c, cedilla</td>
<td>ç</td>
<td>ç</td>
</tr>
<tr>
<td>è</td>
<td>small e, grave accent</td>
<td>è</td>
<td>è</td>
</tr>
<tr>
<td>é</td>
<td>small e, acute accent</td>
<td>é</td>
<td>é</td>
</tr>
<tr>
<td>ë</td>
<td>small e, circumflex accent</td>
<td>ê</td>
<td>ê</td>
</tr>
<tr>
<td>ë</td>
<td>small e, umlaut mark</td>
<td>ë</td>
<td>ë</td>
</tr>
<tr>
<td>ì</td>
<td>small i, grave accent</td>
<td>ì</td>
<td>ì</td>
</tr>
<tr>
<td>ï</td>
<td>small i, acute accent</td>
<td>í</td>
<td>í</td>
</tr>
<tr>
<td>î</td>
<td>small i, circumflex accent</td>
<td>î</td>
<td>î</td>
</tr>
<tr>
<td>ï</td>
<td>small i, umlaut mark</td>
<td>ï</td>
<td>ï</td>
</tr>
<tr>
<td>ð</td>
<td>small eth, Icelandic</td>
<td>ð</td>
<td>ð</td>
</tr>
<tr>
<td>ñ</td>
<td>small n, tilde</td>
<td>ñ</td>
<td>ñ</td>
</tr>
<tr>
<td>ò</td>
<td>small o, grave accent</td>
<td>ò</td>
<td>ò</td>
</tr>
<tr>
<td>Entity</td>
<td>Description</td>
<td>Entity Name</td>
<td>Number Code</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>ó</td>
<td>small o, acute accent</td>
<td>ó</td>
<td>ó</td>
</tr>
<tr>
<td>ô</td>
<td>small o, circumflex accent</td>
<td>ô</td>
<td>ô</td>
</tr>
<tr>
<td>ò</td>
<td>small o, tilde</td>
<td>õ</td>
<td>õ</td>
</tr>
<tr>
<td>ò</td>
<td>small o, umlaut mark</td>
<td>ö</td>
<td>ö</td>
</tr>
<tr>
<td>ø</td>
<td>small o, slash</td>
<td>ø</td>
<td>ø</td>
</tr>
<tr>
<td>ù</td>
<td>small u, grave accent</td>
<td>ù</td>
<td>ù</td>
</tr>
<tr>
<td>ú</td>
<td>small u, acute accent</td>
<td>ú</td>
<td>ú</td>
</tr>
<tr>
<td>û</td>
<td>small u, circumflex accent</td>
<td>û</td>
<td>û</td>
</tr>
<tr>
<td>ü</td>
<td>small u, umlaut mark</td>
<td>ü</td>
<td>ü</td>
</tr>
<tr>
<td>ý</td>
<td>small y, acute accent</td>
<td>ý</td>
<td>ý</td>
</tr>
<tr>
<td>þ</td>
<td>small thorn, Icelandic</td>
<td>þ</td>
<td>þ</td>
</tr>
<tr>
<td>ÿ</td>
<td>small y, umlaut mark</td>
<td>ÿ</td>
<td>ÿ</td>
</tr>
</tbody>
</table>

### Other Entities Supported by HTML Browsers

<table>
<thead>
<tr>
<th>Result</th>
<th>Description</th>
<th>Entity Name</th>
<th>Number Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Æ</td>
<td>capital ligature OE</td>
<td>Œ</td>
<td>Œ</td>
</tr>
<tr>
<td>æ</td>
<td>small ligature oe</td>
<td>œ</td>
<td>œ</td>
</tr>
<tr>
<td>Š</td>
<td>capital S with caron</td>
<td>Š</td>
<td>Š</td>
</tr>
<tr>
<td>š</td>
<td>small S with caron</td>
<td>š</td>
<td>š</td>
</tr>
<tr>
<td>Ŷ</td>
<td>capital Y with diaeres</td>
<td>Ÿ</td>
<td>Ÿ</td>
</tr>
<tr>
<td>^</td>
<td>modifier letter circumflex accent</td>
<td>ˆ</td>
<td>ˆ</td>
</tr>
<tr>
<td>`</td>
<td>small tilde</td>
<td>˜</td>
<td>˜</td>
</tr>
<tr>
<td>en</td>
<td>en space</td>
<td> </td>
<td> </td>
</tr>
<tr>
<td>em</td>
<td>em space</td>
<td> </td>
<td> </td>
</tr>
<tr>
<td>Character</td>
<td>HTML Entity</td>
<td>Hex Code</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td>Thin space</td>
<td> </td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Zero width non-joiner</td>
<td>‌</td>
<td>‌</td>
<td></td>
</tr>
<tr>
<td>Zero width joiner</td>
<td>‍</td>
<td>‍</td>
<td></td>
</tr>
<tr>
<td>Left-to-right mark</td>
<td>‎</td>
<td>‎</td>
<td></td>
</tr>
<tr>
<td>Right-to-left mark</td>
<td>‏</td>
<td>‏</td>
<td></td>
</tr>
<tr>
<td>En dash</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Em dash</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Left single quotation mark</td>
<td>‘</td>
<td>‘</td>
<td></td>
</tr>
<tr>
<td>Right single quotation mark</td>
<td>’</td>
<td>’</td>
<td></td>
</tr>
<tr>
<td>Single low-9 quotation mark</td>
<td>‚</td>
<td>‚</td>
<td></td>
</tr>
<tr>
<td>Left double quotation mark</td>
<td>“</td>
<td>“</td>
<td></td>
</tr>
<tr>
<td>Right double quotation mark</td>
<td>”</td>
<td>”</td>
<td></td>
</tr>
<tr>
<td>Double low-9 quotation mark</td>
<td>„</td>
<td>„</td>
<td></td>
</tr>
<tr>
<td>Dagger</td>
<td>†</td>
<td>‴</td>
<td></td>
</tr>
<tr>
<td>Double dagger</td>
<td>‡</td>
<td>‵</td>
<td></td>
</tr>
<tr>
<td>Horizontal ellipsis</td>
<td>…</td>
<td>…</td>
<td></td>
</tr>
<tr>
<td>Per mille</td>
<td>‰</td>
<td>‰</td>
<td></td>
</tr>
<tr>
<td>Single left-pointing angle quotation</td>
<td>‹</td>
<td>‹</td>
<td></td>
</tr>
<tr>
<td>Single right-pointing angle quotation</td>
<td>›</td>
<td>›</td>
<td></td>
</tr>
<tr>
<td>Euro</td>
<td>€</td>
<td>€</td>
<td></td>
</tr>
</tbody>
</table>
MIME (Multipurpose Internet Mail Extension) media types were originally devised so that e-mails could include information other than plain text. MIME media types indicate the following things:

- How different parts of a message, such as text and attachments, are combined into the message.
- The way in which each part of the message is specified.
- The way different items are encoded for transmission so that even software that was designed to work only with ASCII text can process the message.

Now MIME types are not just for use with e-mail; they have been adopted by Web servers as a way to tell Web browsers what type of material was being sent to them so that they can cope with that kind of messages correctly.

MIME content types consist of two parts:

- A main type
- A sub-type

The main type is separated from the subtype by a forward slash character. For example, text/html for HTML.

This chapter is organized for the main types:

- text
- image
- multipart
- audio
- video
- message
- model
- application

Following are subtypes for text:

<table>
<thead>
<tr>
<th>calendar</th>
<th>css</th>
<th>directory</th>
</tr>
</thead>
<tbody>
<tr>
<td>enriched</td>
<td>html</td>
<td>parityfec</td>
</tr>
<tr>
<td>rfc822-headers</td>
<td>vnd.curl</td>
<td>prs.lines.tag</td>
</tr>
<tr>
<td></td>
<td>richtext</td>
<td>rtf</td>
</tr>
<tr>
<td>sgml</td>
<td>t140</td>
<td>tab-separated-values</td>
</tr>
<tr>
<td>uri-list</td>
<td>vnd.abc</td>
<td>prs.fallenstein.rst</td>
</tr>
</tbody>
</table>
Following are subtypes for **image**:

<table>
<thead>
<tr>
<th>bmp</th>
<th>cgm</th>
<th>g3fax</th>
</tr>
</thead>
<tbody>
<tr>
<td>gif</td>
<td>ief</td>
<td>jpeg</td>
</tr>
<tr>
<td>naplps</td>
<td>png</td>
<td>prs.btif</td>
</tr>
<tr>
<td>prs.pti</td>
<td>t38</td>
<td>vnd.fujixerox.edmics-rlc</td>
</tr>
<tr>
<td>tiff-fx</td>
<td>vnd.cns.inf2</td>
<td>vnd.djvu</td>
</tr>
<tr>
<td>vnd.dwg</td>
<td>vnd.dxf</td>
<td>vnd.fastbidsheet</td>
</tr>
<tr>
<td>vnd.fpx</td>
<td>vnd.fst</td>
<td>vnd.fujixerox.edmics-mmr</td>
</tr>
<tr>
<td>vnd.xiff</td>
<td>tiff</td>
<td>vnd.microsoft.icon</td>
</tr>
<tr>
<td>vnd.mix</td>
<td>vnd.ms-modi</td>
<td>vnd.sealedmedia.softseal.gif</td>
</tr>
<tr>
<td>vnd.net-fpx</td>
<td>vnd.sealed.png</td>
<td>vnd.sealedmedia.softseal.jpg</td>
</tr>
<tr>
<td>vnd.svf</td>
<td>vnd.wap.wbmp</td>
<td>vnd.globalgraphics.pgb</td>
</tr>
<tr>
<td>x-portable-pixmap</td>
<td>x-xbitmap</td>
<td></td>
</tr>
</tbody>
</table>

Following are subtypes for **multipart**:

<table>
<thead>
<tr>
<th>alternative</th>
<th>appledouble</th>
<th>byteranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>digest</td>
<td>encrypted</td>
<td>form-data</td>
</tr>
</tbody>
</table>
Following are subtypes for **audio**:

<table>
<thead>
<tr>
<th>subtype</th>
<th>format</th>
<th>subtype</th>
</tr>
</thead>
<tbody>
<tr>
<td>32kadpcm</td>
<td>GSM-EFR</td>
<td>vnd.3gpp.iufp</td>
</tr>
<tr>
<td>AMR</td>
<td>L8</td>
<td>vnd.cisco.nse</td>
</tr>
<tr>
<td>AMR-WB</td>
<td>L16</td>
<td>vnd.cns.anp1</td>
</tr>
<tr>
<td>basic</td>
<td>L20</td>
<td>vnd.cns.inf1</td>
</tr>
<tr>
<td>CN</td>
<td>L24</td>
<td>vnd.digital-winds</td>
</tr>
<tr>
<td>DAT12</td>
<td>LPC</td>
<td>vnd.everad.plj</td>
</tr>
<tr>
<td>dsr-es201108</td>
<td>MPA</td>
<td>vnd.lucent.voice</td>
</tr>
<tr>
<td>DVI4</td>
<td>MP4A-LATM</td>
<td>vnd.nokia.mobile-xmf</td>
</tr>
<tr>
<td>EVRC</td>
<td>mpa-robust</td>
<td>vnd.nortel.vbk</td>
</tr>
<tr>
<td>EVRC0</td>
<td>mpeg</td>
<td>vnd.nuera.ecelp4800</td>
</tr>
<tr>
<td>EVRC-QCP</td>
<td>mpeg4-generic</td>
<td>vnd.nuera.ecelp7470</td>
</tr>
<tr>
<td>G722</td>
<td>parityfec</td>
<td>vnd.nuera.ecelp9600</td>
</tr>
<tr>
<td>G.722.1</td>
<td>PCMA</td>
<td>vnd.octel.sbc</td>
</tr>
<tr>
<td>G723</td>
<td>PCMU</td>
<td>vnd.qcelp.deprecated,use audio/qcelp</td>
</tr>
<tr>
<td>G726-16</td>
<td>prs.sid</td>
<td>vnd.rhetorex.32kadpcm</td>
</tr>
<tr>
<td>Coding</td>
<td>Codec</td>
<td>Subtype</td>
</tr>
<tr>
<td>--------</td>
<td>-------</td>
<td>-----------</td>
</tr>
<tr>
<td>G726-24</td>
<td>QCELP</td>
<td>vnd.sealedmedia.softseal.mpeg</td>
</tr>
<tr>
<td>G726-32</td>
<td>RED</td>
<td>vnd.vmx.cvsd</td>
</tr>
<tr>
<td>G726-40</td>
<td>SMV</td>
<td>x-aiff</td>
</tr>
<tr>
<td>G728</td>
<td>SMV0</td>
<td>x-midi</td>
</tr>
<tr>
<td>G729</td>
<td>SMV-QCP</td>
<td>x-mod</td>
</tr>
<tr>
<td>G729D</td>
<td>telephone-event</td>
<td>x-mp3</td>
</tr>
<tr>
<td>G729E</td>
<td>tone</td>
<td>x-wav</td>
</tr>
<tr>
<td>GSM</td>
<td>VDVI</td>
<td></td>
</tr>
</tbody>
</table>

Following are subtypes for **video**:  

<table>
<thead>
<tr>
<th>Coding</th>
<th>Codec</th>
<th>Subtype</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMPEG</td>
<td>MP4V-ES</td>
<td>vnd.mpegurl</td>
</tr>
<tr>
<td>BT656</td>
<td>MPV</td>
<td>vnd.nokia.interleaved-multimedia</td>
</tr>
<tr>
<td>CelB</td>
<td>mpeg</td>
<td>vnd.objectvideo</td>
</tr>
<tr>
<td>DV</td>
<td>mpeg4-generic</td>
<td>vnd.sealed.mpeg1</td>
</tr>
<tr>
<td>H261</td>
<td>nv</td>
<td>vnd.sealed.mpeg4</td>
</tr>
<tr>
<td>H263</td>
<td>parityfec</td>
<td>vnd.sealed.swf</td>
</tr>
<tr>
<td>H263-1998</td>
<td>pointer</td>
<td>vnd.sealedmedia.softseal.mov</td>
</tr>
<tr>
<td>H263-2000</td>
<td>quicktime</td>
<td>vnd.vivo</td>
</tr>
<tr>
<td>JPEG</td>
<td>SMPTE292M</td>
<td>x-sgi-movie</td>
</tr>
<tr>
<td>MP1S</td>
<td>vnd.fvt</td>
<td>x-msvideo</td>
</tr>
<tr>
<td>------</td>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>MP2P</td>
<td>vnd.motorola.video</td>
<td></td>
</tr>
<tr>
<td>MP2T</td>
<td>vnd.motorola.videop</td>
<td></td>
</tr>
</tbody>
</table>

Following are subtypes for **message**:

<table>
<thead>
<tr>
<th>CPIM</th>
<th>http</th>
<th>s-http</th>
</tr>
</thead>
<tbody>
<tr>
<td>delivery-status</td>
<td>news</td>
<td>sip</td>
</tr>
<tr>
<td>disposition-notification</td>
<td>partial</td>
<td>sipfrag</td>
</tr>
<tr>
<td>external-body</td>
<td>rfc822</td>
<td></td>
</tr>
</tbody>
</table>

Following are subtypes for **model**:

<table>
<thead>
<tr>
<th>iges</th>
<th>vnd.gdl</th>
<th>vnd.parasolid.transmit.binary</th>
</tr>
</thead>
<tbody>
<tr>
<td>mesh</td>
<td>vnd.gs-gdl</td>
<td>vnd.parasolid.transmit.text</td>
</tr>
<tr>
<td>vnd.dwf</td>
<td>vnd.gtw</td>
<td>vnd.vtu</td>
</tr>
<tr>
<td>vnd.flatland.3dml</td>
<td>vnd.mts</td>
<td>vrml</td>
</tr>
</tbody>
</table>

Following are subtypes for **application**:

<table>
<thead>
<tr>
<th>activemessage</th>
<th>andrew-inset</th>
</tr>
</thead>
<tbody>
<tr>
<td>applefile</td>
<td>atomicmail</td>
</tr>
<tr>
<td>batch-SMTP</td>
<td>beep+xml</td>
</tr>
<tr>
<td>cals-1840</td>
<td>cnrp+xml</td>
</tr>
<tr>
<td>commonground</td>
<td>cpl+xml</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>cybercash</td>
<td>dca-rft</td>
</tr>
<tr>
<td>dec-dx</td>
<td>dicom</td>
</tr>
<tr>
<td>dvcs</td>
<td>EDI-Consent</td>
</tr>
<tr>
<td>EDIFACT</td>
<td>eshop</td>
</tr>
<tr>
<td>font-tdpfr</td>
<td>http</td>
</tr>
<tr>
<td>hyperstudio</td>
<td>iges</td>
</tr>
<tr>
<td>index</td>
<td>index.cmd</td>
</tr>
<tr>
<td>index.obj</td>
<td>index.response</td>
</tr>
<tr>
<td>index.vnd</td>
<td>iotp</td>
</tr>
<tr>
<td>ipp</td>
<td>isup</td>
</tr>
<tr>
<td>mac-binhex40</td>
<td>macwriteii</td>
</tr>
<tr>
<td>marc</td>
<td>mathematica</td>
</tr>
<tr>
<td>mpeg4-generic</td>
<td>msword</td>
</tr>
<tr>
<td>news-message-id</td>
<td>news-transmission</td>
</tr>
<tr>
<td>ocsp-request</td>
<td>ocsp-response</td>
</tr>
<tr>
<td>octet-stream</td>
<td>oda</td>
</tr>
<tr>
<td>ogg</td>
<td>parityfec</td>
</tr>
<tr>
<td>File Format</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>pdf</td>
<td>pgp-encrypted</td>
</tr>
<tr>
<td>pgp-keys</td>
<td>pgp-signature</td>
</tr>
<tr>
<td>pidf+xml</td>
<td>pkcs10</td>
</tr>
<tr>
<td>pkcs7-mime</td>
<td>pkcs7-signature</td>
</tr>
<tr>
<td>pkix-cert</td>
<td>pkixcmp</td>
</tr>
<tr>
<td>pkix-crl</td>
<td>pkix-pkipath</td>
</tr>
<tr>
<td>postscript</td>
<td>prs.alvestrand.titrax-sheet</td>
</tr>
<tr>
<td>prs.cww</td>
<td>prs.nprend</td>
</tr>
<tr>
<td>prs.plucker</td>
<td>qsig</td>
</tr>
<tr>
<td>reginfo+xml</td>
<td>remote-printing</td>
</tr>
<tr>
<td>riscos</td>
<td>rtf</td>
</tr>
<tr>
<td>sdp</td>
<td>set-payment</td>
</tr>
<tr>
<td>set-payment-initiation</td>
<td>set-registration</td>
</tr>
<tr>
<td>set-registration-initiation</td>
<td>sgml</td>
</tr>
<tr>
<td>sgml-open-catalog</td>
<td>sieve</td>
</tr>
<tr>
<td>slate</td>
<td>timestamp-query</td>
</tr>
<tr>
<td>timestamp-reply</td>
<td>tve-trigger</td>
</tr>
<tr>
<td>vemmi</td>
<td>vnd.3gpp.pic-bw-large</td>
</tr>
<tr>
<td>vnd.3gpp.pic-bw-small</td>
<td>vnd.3gpp.pic-bw-var</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>vnd.3gpp.sms</td>
<td>vnd.3M.Post-it-Notes</td>
</tr>
<tr>
<td>vnd.accpac.simply.aso</td>
<td>vnd.accpac.simply.imp</td>
</tr>
<tr>
<td>vnd.acucobol</td>
<td>vnd.acucorp</td>
</tr>
<tr>
<td>vnd.adobe.xfdf</td>
<td>vnd.aether.imp</td>
</tr>
<tr>
<td>vnd.amiga.ami</td>
<td>vnd.anser-web-certificate-issue-initiation</td>
</tr>
<tr>
<td>vnd.audiograph</td>
<td>vnd.anser-web-funds-transfer-initiation</td>
</tr>
<tr>
<td>vnd.blueice.multipass</td>
<td>vnd.bmi</td>
</tr>
<tr>
<td>vnd.businessobjects</td>
<td>vnd.canon-cpdl</td>
</tr>
<tr>
<td>vnd.canon-lips</td>
<td>vnd.cinderella</td>
</tr>
<tr>
<td>vnd.claymore</td>
<td>vnd.commerce-battelle</td>
</tr>
<tr>
<td>vnd.commonspace</td>
<td>vnd.cosmocaller</td>
</tr>
<tr>
<td>vnd.contact.cmsg</td>
<td>vnd.criticaltools.wbs+xml</td>
</tr>
<tr>
<td>vnd.ctc-posml</td>
<td>vnd.cups-postscript</td>
</tr>
<tr>
<td>vnd.cups-raster</td>
<td>vnd.cups-raw</td>
</tr>
<tr>
<td>vnd.curl</td>
<td>vnd.cybank</td>
</tr>
<tr>
<td>vnd.data-vision.rdz</td>
<td>vnd.dna</td>
</tr>
<tr>
<td>vnd.dpgraph</td>
<td>vnd.dreamfactory</td>
</tr>
<tr>
<td>vnd.dxr</td>
<td>vnd.ecdis-update</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------</td>
</tr>
<tr>
<td>vnd.ecowin.chart</td>
<td>vnd.ecowin.filerequest</td>
</tr>
<tr>
<td>vnd.ecowin.fileupdate</td>
<td>vnd.ecowin.series</td>
</tr>
<tr>
<td>vnd.ecowin.seriesrequest</td>
<td>vnd.ecowin.seriesupdate</td>
</tr>
<tr>
<td>vnd.enliven</td>
<td>vnd.epson.esf</td>
</tr>
<tr>
<td>vnd.epson.msf</td>
<td>vnd.epson.quickanime</td>
</tr>
<tr>
<td>vnd.epson.salt</td>
<td>vnd.epson.ssf</td>
</tr>
<tr>
<td>vnd.ericsson.quickcall</td>
<td>vnd.eudora.data</td>
</tr>
<tr>
<td>vnd.fdf</td>
<td>vnd.ffsns</td>
</tr>
<tr>
<td>vnd.fints</td>
<td>vnd.FloGraphIt</td>
</tr>
<tr>
<td>vnd.framemaker</td>
<td>vnd.fsc.weblaunch</td>
</tr>
<tr>
<td>vnd.fujitsu.oasys</td>
<td>vnd.fujitsu.oasys2</td>
</tr>
<tr>
<td>vnd.fujitsu.oasys3</td>
<td>vnd.fujitsu.oasysgp</td>
</tr>
<tr>
<td>vnd.fujitsu.oasysprs</td>
<td>vnd.fujixerox.ddd</td>
</tr>
<tr>
<td>vnd.fujixerox.docuworks</td>
<td>vnd.fujixerox.docuworks.binder</td>
</tr>
<tr>
<td>vnd.fut-misnet</td>
<td>vnd.genomatix.tuxedo</td>
</tr>
<tr>
<td>vnd.grafeq</td>
<td>vnd.groove-account</td>
</tr>
<tr>
<td>vnd.groove-help</td>
<td>vnd.groove-identity-message</td>
</tr>
<tr>
<td>vnd.groove-injector</td>
<td>vnd.groove-tool-message</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>vnd.groove-tool-template</td>
<td>vnd.groove-vcard</td>
</tr>
<tr>
<td>vnd.hbci</td>
<td>vnd.hhe.lesson-player</td>
</tr>
<tr>
<td>vnd.hp-HPGL</td>
<td>vnd.hp-hpid</td>
</tr>
<tr>
<td>vnd.hp-hps</td>
<td>vnd.hp-PCL</td>
</tr>
<tr>
<td>vnd.hp-PCLXL</td>
<td>vnd.httphone</td>
</tr>
<tr>
<td>vnd.hzn-3d-crossword</td>
<td>vnd.ibm.afplinedata</td>
</tr>
<tr>
<td>vnd.ibm.electronic-media</td>
<td>vnd.ibm.MiniPay</td>
</tr>
<tr>
<td>vnd.ibm.modcap</td>
<td>vnd.ibm.rights-management</td>
</tr>
<tr>
<td>vnd.ibm.secure-container</td>
<td>vnd.informix-visionary</td>
</tr>
<tr>
<td>vnd.intercon.formnet</td>
<td>vnd.intertrust.digibox</td>
</tr>
<tr>
<td>vnd.intertrust.nncp</td>
<td>vnd.japannet-registration-wakeup</td>
</tr>
<tr>
<td>vnd.intu.qfx</td>
<td>vnd.ipunplugged.rcprofile</td>
</tr>
<tr>
<td>vnd.repository.package+xml</td>
<td>vnd.is-xpr</td>
</tr>
<tr>
<td>vnd.japannet-directory-service</td>
<td>vnd.japannet-jpnstore-wakeup</td>
</tr>
<tr>
<td>vnd.japannet-payment-wakeup</td>
<td>vnd.japannet-registration</td>
</tr>
<tr>
<td>vnd.intu.qbo</td>
<td>vnd.japannet-setstore-wakeup</td>
</tr>
<tr>
<td>vnd.japannet-verification</td>
<td>vnd.japannet-verification-wakeup</td>
</tr>
<tr>
<td>vnd.jisp</td>
<td>vnd.kde.karbon</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>vnd.kde.kchart</td>
<td>vnd.kde.kformula</td>
</tr>
<tr>
<td>vnd.kde.kivio</td>
<td>vnd.kde.kkontour</td>
</tr>
<tr>
<td>vnd.kde.kpresenter</td>
<td>vnd.kde.kspread</td>
</tr>
<tr>
<td>vnd.kde.kword</td>
<td>vnd.kenameaapp</td>
</tr>
<tr>
<td>vnd.kidspiration</td>
<td>vnd.koan</td>
</tr>
<tr>
<td>vnd.liberty-request+xml</td>
<td>vnd.llamagraphics.life-balance.desktop</td>
</tr>
<tr>
<td>vnd.lotus-1-2-3</td>
<td>vnd.llamagraphics.life-balance.exchange+xml</td>
</tr>
<tr>
<td>vnd.lotus-approach</td>
<td>vnd.lotus-freelance</td>
</tr>
<tr>
<td>vnd.lotus-notes</td>
<td>vnd.lotus-organizer</td>
</tr>
<tr>
<td>vnd.lotus-screencam</td>
<td>vnd.lotus-wordpro</td>
</tr>
<tr>
<td>vnd.mcd</td>
<td>vnd.mediatation.cdkey</td>
</tr>
<tr>
<td>vnd.meridian-slingshot</td>
<td>vnd.micrografx.flo</td>
</tr>
<tr>
<td>vnd.micrografx.igx</td>
<td>vnd.mif</td>
</tr>
<tr>
<td>vnd.minisoft-hp3000-save</td>
<td>vnd.mitsubishi.misty-guard.trustweb</td>
</tr>
<tr>
<td>vnd.Mobius.DAF</td>
<td>vnd.Mobius.DIS</td>
</tr>
<tr>
<td>vnd.Mobius.MBK</td>
<td>vnd.Mobius.MQY</td>
</tr>
<tr>
<td>vnd.Mobius.MSL</td>
<td>vnd.Mobius.PLC</td>
</tr>
<tr>
<td>MIME Type</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>vnd.Mobius.TXF</td>
<td>vnd.mophun.application</td>
</tr>
<tr>
<td>vnd.mophun.certificate</td>
<td>vnd.motorola.flexsuite</td>
</tr>
<tr>
<td>vnd.motorola.flexsuite.adsi</td>
<td>vnd.motorola.flexsuite.fis</td>
</tr>
<tr>
<td>vnd.motorola.flexsuite.gotap</td>
<td>vnd.motorola.flexsuite.kmr</td>
</tr>
<tr>
<td>vnd.motorola.flexsuite.ttc</td>
<td>vnd.motorola.flexsuite.wem</td>
</tr>
<tr>
<td>vnd.mozilla.xul+ttc</td>
<td>vnd.ms-artgalry</td>
</tr>
<tr>
<td>vnd.ms-asf</td>
<td>vnd.mseq</td>
</tr>
<tr>
<td>vnd.ms-excel</td>
<td>vnd.msign</td>
</tr>
<tr>
<td>vnd.ms-irm</td>
<td>vnd.ms-powerpoint</td>
</tr>
<tr>
<td>vnd.ms-project</td>
<td>vnd.ms-tnef</td>
</tr>
<tr>
<td>vnd.ms-works</td>
<td>vnd.ms-wpl</td>
</tr>
<tr>
<td>vnd.musician</td>
<td>vnd.music-niff</td>
</tr>
<tr>
<td>vnd.nervana</td>
<td>vnd.netfpx</td>
</tr>
<tr>
<td>vnd.noblenet-directory</td>
<td>vnd.noblenet-sealer</td>
</tr>
<tr>
<td>vnd.noblenet-web</td>
<td>vnd.novadigm.EDM</td>
</tr>
<tr>
<td>vnd.novadigm.EDX</td>
<td>vnd.novadigm.EXT</td>
</tr>
<tr>
<td>vnd.obn</td>
<td>vnd.osa.netdeploy</td>
</tr>
<tr>
<td>vnd.palm</td>
<td>vnd.paos.xml</td>
</tr>
<tr>
<td>vnd.pg.format</td>
<td>vnd.picsel</td>
</tr>
<tr>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>vnd.pg.osasli</td>
<td>vnd.powerbuilder6</td>
</tr>
<tr>
<td>vnd.powerbuilder6-s</td>
<td>vnd.powerbuilder7</td>
</tr>
<tr>
<td>vnd.powerbuilder75</td>
<td>vnd.powerbuilder75-s</td>
</tr>
<tr>
<td>vnd.powerbuilder7-s</td>
<td>vnd.previewsystems.box</td>
</tr>
<tr>
<td>vnd.publishare-delta-tree</td>
<td>vnd.pvi.ptid1</td>
</tr>
<tr>
<td>vnd.pwg-multiplexed [RFC3391]</td>
<td>vnd.pwg-xhtml-print+xml</td>
</tr>
<tr>
<td>vnd.Quark.QuarkXPress</td>
<td>vnd.rapid</td>
</tr>
<tr>
<td>vnd.s3sms</td>
<td>vnd.sealed.doc</td>
</tr>
<tr>
<td>vnd.sealed.eml</td>
<td>vnd.sealed.mht</td>
</tr>
<tr>
<td>vnd.sealed.net</td>
<td>vnd.sealed.ppt</td>
</tr>
<tr>
<td>vnd.sealed.xls</td>
<td>vnd.sealedmedia.softseal.html</td>
</tr>
<tr>
<td>vnd.sealedmedia.softseal.pdf</td>
<td>vnd.shana.informed.interchange</td>
</tr>
<tr>
<td>vnd.shana.informed.formdata</td>
<td>vnd.shana.informed.formtemplate</td>
</tr>
<tr>
<td>vnd.seemai</td>
<td>vnd.shana.informed.package</td>
</tr>
<tr>
<td>vnd.smaf</td>
<td>vnd.sss-cod</td>
</tr>
<tr>
<td>vnd.sss-dtf</td>
<td>vnd.sss-ntf</td>
</tr>
<tr>
<td>vnd.street-stream</td>
<td>vnd.svd</td>
</tr>
<tr>
<td>vnd.swiftview-ics</td>
<td>vnd.triscape.mxs</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>vnd.trueapp</td>
<td>vnd.truedoc</td>
</tr>
<tr>
<td>vnd.ufdl</td>
<td>vnd.uiq.theme</td>
</tr>
<tr>
<td>vnd.uplanet.alert</td>
<td>vnd.uplanet.alert-wbxml</td>
</tr>
<tr>
<td>vnd.uplanet.bearer-choice</td>
<td>vnd.uplanet.bearer-choice-wbxml</td>
</tr>
<tr>
<td>vnd.uplanet.cacheop</td>
<td>vnd.uplanet.cacheop-wbxml</td>
</tr>
<tr>
<td>vnd.uplanet.channel</td>
<td>vnd.uplanet.channel-wbxml</td>
</tr>
<tr>
<td>vnd.uplanet.list</td>
<td>vnd.uplanet.listcmd</td>
</tr>
<tr>
<td>vnd.uplanet.listcmd-wbxml</td>
<td>vnd.uplanet.list-wbxml</td>
</tr>
<tr>
<td>vnd.uplanet.signal</td>
<td>vnd.vcx</td>
</tr>
<tr>
<td>vnd.vectorworks</td>
<td>vnd.vidsoft.vidconference</td>
</tr>
<tr>
<td>vnd.visio</td>
<td>vnd.visionary</td>
</tr>
<tr>
<td>vnd.vividence.scriptfile</td>
<td>vnd.vsf</td>
</tr>
<tr>
<td>vnd.wap.sic</td>
<td>vnd.wap.slc</td>
</tr>
<tr>
<td>vnd.wap.wbxml</td>
<td>vnd.wap.wmlc</td>
</tr>
<tr>
<td>vnd.wap.wmlscriptc</td>
<td>vnd.webturbo</td>
</tr>
<tr>
<td>vnd.wqd</td>
<td>vnd.wrq-hp3000-labelled</td>
</tr>
<tr>
<td>vnd.wt.stf</td>
<td>vnd.wv.csp+xml</td>
</tr>
</tbody>
</table>
For example, the text main type contains types of plain text files, such as:

- text/plain for plain text files
- text/html for HTML files
- text/rtf for text files using rich text formatting

MIME types are officially supposed to be assigned and listed by the Internet Assigned Numbers Authority (IANA).
Many of the popular MIME types in this list (all those begin with "x-") are not assigned by the IANA and do not have official status. You can see the list of official MIME types at http://www.iana.org/assignments/media-types/. Those preceded with .vnd are vendor-specific.

When specifying the MIME type of a content-type field you can also indicate the character set for the text being used. If you do not specify a character set, the default is US-ASCII. For example:

```
content-type:text/plain; charset=iso-8859-1
```
URL encoding is the practice of translating unprintable characters or characters with special meaning within URLs to a representation that is unambiguous and universally accepted by web browsers and servers. These characters include:

- **ASCII control characters**: Unprintable characters typically used for output control. Character ranges 00-1F hex (0-31 decimal) and 7F (127 decimal). A complete encoding table is given below.

- **Non-ASCII control characters**: These are characters beyond the ASCII character set of 128 characters. This range is part of the ISO-Latin character set and includes the entire "top half" of the ISO-Latin set 80-FF hex (128-255 decimal). A complete encoding table is given below.

- **Reserved characters**: These are special characters such as the dollar sign, ampersand, plus, common, forward slash, colon, semi-colon, equals sign, question mark, and "at" symbol. All of these can have different meanings inside a URL so need to be encoded. A complete encoding table is given below.

- **Unsafe characters**: These are space, quotation marks, less than symbol, greater than symbol, pound character, percent character, Left Curly Brace, Right Curly Brace, Pipe, Backslash, Caret, Tilde, Left Square Bracket, Right Square Bracket, Grave Accent. These character present the possibility of being misunderstood within URLs for various reasons. These characters should also always be encoded. A complete encoding table is given below.

The encoding notation replaces the desired character with three characters: a percent sign and two hexadecimal digits that correspond to the position of the character in the ASCII character set.

**Example**

One of the most common special characters is a white space. You can't type a space in a URL directly. A space position in the character set is 20 hexadecimal. So you can use %20 in place of a space when passing your request to the server.

```
http://www.example.com/new%20pricing.htm
```

This URL actually retrieves a document named "new pricing.htm" from the www.example.com
# ASCII Control Characters Encoding

This includes the encoding for character ranges 00-1F hex (0-31 decimal) and 7F (127 decimal)

<table>
<thead>
<tr>
<th>Decimal</th>
<th>Hex Value</th>
<th>Character</th>
<th>URL Encode</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>00</td>
<td></td>
<td>%00</td>
</tr>
<tr>
<td>1</td>
<td>01</td>
<td></td>
<td>%01</td>
</tr>
<tr>
<td>2</td>
<td>02</td>
<td></td>
<td>%02</td>
</tr>
<tr>
<td>3</td>
<td>03</td>
<td></td>
<td>%03</td>
</tr>
<tr>
<td>4</td>
<td>04</td>
<td></td>
<td>%04</td>
</tr>
<tr>
<td>5</td>
<td>05</td>
<td></td>
<td>%05</td>
</tr>
<tr>
<td>6</td>
<td>06</td>
<td></td>
<td>%06</td>
</tr>
<tr>
<td>7</td>
<td>07</td>
<td></td>
<td>%07</td>
</tr>
<tr>
<td>8</td>
<td>08</td>
<td>backspace</td>
<td>%08</td>
</tr>
<tr>
<td>9</td>
<td>09</td>
<td>tab</td>
<td>%09</td>
</tr>
<tr>
<td>10</td>
<td>0a</td>
<td>linefeed</td>
<td>%0a</td>
</tr>
<tr>
<td>11</td>
<td>0b</td>
<td></td>
<td>%0b</td>
</tr>
<tr>
<td>12</td>
<td>0c</td>
<td></td>
<td>%0c</td>
</tr>
<tr>
<td>13</td>
<td>0d</td>
<td>carriage return</td>
<td>%0d</td>
</tr>
<tr>
<td>14</td>
<td>0e</td>
<td></td>
<td>%0e</td>
</tr>
<tr>
<td>15</td>
<td>0f</td>
<td></td>
<td>%0f</td>
</tr>
<tr>
<td>16</td>
<td>10</td>
<td></td>
<td>%10</td>
</tr>
<tr>
<td>17</td>
<td>11</td>
<td></td>
<td>%11</td>
</tr>
<tr>
<td>18</td>
<td>12</td>
<td></td>
<td>%12</td>
</tr>
<tr>
<td>19</td>
<td>13</td>
<td></td>
<td>%13</td>
</tr>
</tbody>
</table>
### Non-ASCII control characters encoding

This includes the encoding for the entire "top half" of the ISO-Latin set 80-FF hex (128-255 decimal.)

<table>
<thead>
<tr>
<th>Decimal</th>
<th>Hex Value</th>
<th>Character</th>
<th>URL Encode</th>
</tr>
</thead>
<tbody>
<tr>
<td>128</td>
<td>80</td>
<td>€</td>
<td>%80</td>
</tr>
<tr>
<td>129</td>
<td>81</td>
<td>·</td>
<td>%81</td>
</tr>
<tr>
<td>130</td>
<td>82</td>
<td>,</td>
<td>%82</td>
</tr>
<tr>
<td>131</td>
<td>83</td>
<td>f</td>
<td>%83</td>
</tr>
<tr>
<td>132</td>
<td>84</td>
<td>&quot;</td>
<td>%84</td>
</tr>
<tr>
<td>HTML</td>
<td>133</td>
<td>85</td>
<td>...</td>
</tr>
<tr>
<td>--------</td>
<td>-----</td>
<td>----</td>
<td>-----</td>
</tr>
<tr>
<td>134</td>
<td>86</td>
<td>†</td>
<td></td>
</tr>
<tr>
<td>135</td>
<td>87</td>
<td>‡</td>
<td></td>
</tr>
<tr>
<td>136</td>
<td>88</td>
<td>′</td>
<td></td>
</tr>
<tr>
<td>137</td>
<td>89</td>
<td>‰</td>
<td></td>
</tr>
<tr>
<td>138</td>
<td>8a</td>
<td>Š</td>
<td></td>
</tr>
<tr>
<td>139</td>
<td>8b</td>
<td>&lt;</td>
<td></td>
</tr>
<tr>
<td>140</td>
<td>8c</td>
<td>Œ</td>
<td></td>
</tr>
<tr>
<td>141</td>
<td>8d</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>142</td>
<td>8e</td>
<td>Ž</td>
<td></td>
</tr>
<tr>
<td>143</td>
<td>8f</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>144</td>
<td>90</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>145</td>
<td>91</td>
<td>′</td>
<td></td>
</tr>
<tr>
<td>146</td>
<td>92</td>
<td>′</td>
<td></td>
</tr>
<tr>
<td>147</td>
<td>93</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td>148</td>
<td>94</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td>149</td>
<td>95</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>96</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>151</td>
<td>97</td>
<td>—</td>
<td>%97</td>
</tr>
<tr>
<td>152</td>
<td>98</td>
<td>~</td>
<td>%98</td>
</tr>
<tr>
<td>153</td>
<td>99</td>
<td>™</td>
<td>%99</td>
</tr>
<tr>
<td>154</td>
<td>9a</td>
<td>š</td>
<td>%9a</td>
</tr>
<tr>
<td>155</td>
<td>9b</td>
<td>›</td>
<td>%9b</td>
</tr>
<tr>
<td>156</td>
<td>9c</td>
<td>œ</td>
<td>%9c</td>
</tr>
<tr>
<td>157</td>
<td>9d</td>
<td>•</td>
<td>%9d</td>
</tr>
<tr>
<td>158</td>
<td>9e</td>
<td>ŵ</td>
<td>%9e</td>
</tr>
<tr>
<td>159</td>
<td>9f</td>
<td>Ŷ</td>
<td>%9f</td>
</tr>
<tr>
<td>160</td>
<td>a0</td>
<td></td>
<td>%a0</td>
</tr>
<tr>
<td>161</td>
<td>a1</td>
<td>i</td>
<td>%a1</td>
</tr>
<tr>
<td>162</td>
<td>a2</td>
<td>ç</td>
<td>%a2</td>
</tr>
<tr>
<td>163</td>
<td>a3</td>
<td>£</td>
<td>%a3</td>
</tr>
<tr>
<td>164</td>
<td>a4</td>
<td>º</td>
<td>%a4</td>
</tr>
<tr>
<td>165</td>
<td>a5</td>
<td>¥</td>
<td>%a5</td>
</tr>
<tr>
<td>166</td>
<td>a6</td>
<td>§</td>
<td>%a6</td>
</tr>
<tr>
<td>167</td>
<td>a7</td>
<td>«</td>
<td>%a7</td>
</tr>
<tr>
<td>168</td>
<td>a8</td>
<td>-</td>
<td>%a8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>169</td>
<td>a9</td>
<td>©</td>
<td>%a9</td>
</tr>
<tr>
<td>170</td>
<td>aa</td>
<td>a</td>
<td>%aa</td>
</tr>
<tr>
<td>171</td>
<td>ab</td>
<td>«</td>
<td>%ab</td>
</tr>
<tr>
<td>172</td>
<td>ac</td>
<td>¬</td>
<td>%ac</td>
</tr>
<tr>
<td>173</td>
<td>ad</td>
<td></td>
<td>%ad</td>
</tr>
<tr>
<td>174</td>
<td>ae</td>
<td>®</td>
<td>%ae</td>
</tr>
<tr>
<td>175</td>
<td>af</td>
<td>-</td>
<td>%af</td>
</tr>
<tr>
<td>176</td>
<td>b0</td>
<td>°</td>
<td>%b0</td>
</tr>
<tr>
<td>177</td>
<td>b1</td>
<td>±</td>
<td>%b1</td>
</tr>
<tr>
<td>178</td>
<td>b2</td>
<td>²</td>
<td>%b2</td>
</tr>
<tr>
<td>179</td>
<td>b3</td>
<td>³</td>
<td>%b3</td>
</tr>
<tr>
<td>180</td>
<td>b4</td>
<td>′</td>
<td>%b4</td>
</tr>
<tr>
<td>181</td>
<td>b5</td>
<td>µ</td>
<td>%b5</td>
</tr>
<tr>
<td>182</td>
<td>b6</td>
<td>‖</td>
<td>%b6</td>
</tr>
<tr>
<td>183</td>
<td>b7</td>
<td></td>
<td>%b7</td>
</tr>
<tr>
<td>184</td>
<td>b8</td>
<td></td>
<td>%b8</td>
</tr>
<tr>
<td>185</td>
<td>b9</td>
<td>¹</td>
<td>%b9</td>
</tr>
<tr>
<td>186</td>
<td>ba</td>
<td>²</td>
<td>%ba</td>
</tr>
<tr>
<td>Unicode</td>
<td>Character</td>
<td>Value</td>
<td>HTML</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
<td>-------</td>
<td>--------</td>
</tr>
<tr>
<td>187</td>
<td>bb</td>
<td>»</td>
<td>%bb</td>
</tr>
<tr>
<td>188</td>
<td>bc</td>
<td>¼</td>
<td>%bc</td>
</tr>
<tr>
<td>189</td>
<td>bd</td>
<td>½</td>
<td>%bd</td>
</tr>
<tr>
<td>190</td>
<td>be</td>
<td>¾</td>
<td>%be</td>
</tr>
<tr>
<td>191</td>
<td>bf</td>
<td>ç</td>
<td>%bf</td>
</tr>
<tr>
<td>192</td>
<td>c0</td>
<td>À</td>
<td>%c0</td>
</tr>
<tr>
<td>193</td>
<td>c1</td>
<td>Á</td>
<td>%c1</td>
</tr>
<tr>
<td>194</td>
<td>c2</td>
<td>À</td>
<td>%c2</td>
</tr>
<tr>
<td>195</td>
<td>c3</td>
<td>Å</td>
<td>%c3</td>
</tr>
<tr>
<td>196</td>
<td>c4</td>
<td>Å</td>
<td>%c4</td>
</tr>
<tr>
<td>197</td>
<td>c5</td>
<td>Å</td>
<td>%c5</td>
</tr>
<tr>
<td>198</td>
<td>c6</td>
<td>Æ</td>
<td>%c6</td>
</tr>
<tr>
<td>199</td>
<td>c7</td>
<td>Ç</td>
<td>%c7</td>
</tr>
<tr>
<td>200</td>
<td>c8</td>
<td>È</td>
<td>%c8</td>
</tr>
<tr>
<td>201</td>
<td>c9</td>
<td>É</td>
<td>%c9</td>
</tr>
<tr>
<td>202</td>
<td>ca</td>
<td>È</td>
<td>%ca</td>
</tr>
<tr>
<td>203</td>
<td>cb</td>
<td>È</td>
<td>%cb</td>
</tr>
<tr>
<td>204</td>
<td>cc</td>
<td>Ì</td>
<td>%cc</td>
</tr>
<tr>
<td>Code</td>
<td>Character</td>
<td>Unicode</td>
<td>HTML Replacement</td>
</tr>
<tr>
<td>------</td>
<td>-----------</td>
<td>---------</td>
<td>------------------</td>
</tr>
<tr>
<td>205</td>
<td>cd</td>
<td>í</td>
<td>%cd</td>
</tr>
<tr>
<td>206</td>
<td>ce</td>
<td>ĭ</td>
<td>%ce</td>
</tr>
<tr>
<td>207</td>
<td>cf</td>
<td>ĭ</td>
<td>%cf</td>
</tr>
<tr>
<td>208</td>
<td>d0</td>
<td>Ø</td>
<td>%d0</td>
</tr>
<tr>
<td>209</td>
<td>d1</td>
<td>Ñ</td>
<td>%d1</td>
</tr>
<tr>
<td>210</td>
<td>d2</td>
<td>Ò</td>
<td>%d2</td>
</tr>
<tr>
<td>211</td>
<td>d3</td>
<td>Ó</td>
<td>%d3</td>
</tr>
<tr>
<td>212</td>
<td>d4</td>
<td>Ó</td>
<td>%d4</td>
</tr>
<tr>
<td>213</td>
<td>d5</td>
<td>Ó</td>
<td>%d5</td>
</tr>
<tr>
<td>214</td>
<td>d6</td>
<td>Ó</td>
<td>%d6</td>
</tr>
<tr>
<td>215</td>
<td>d7</td>
<td>×</td>
<td>%d7</td>
</tr>
<tr>
<td>216</td>
<td>d8</td>
<td>Ø</td>
<td>%d8</td>
</tr>
<tr>
<td>217</td>
<td>d9</td>
<td>Ù</td>
<td>%d9</td>
</tr>
<tr>
<td>218</td>
<td>da</td>
<td>Ú</td>
<td>%da</td>
</tr>
<tr>
<td>219</td>
<td>db</td>
<td>Ú</td>
<td>%db</td>
</tr>
<tr>
<td>220</td>
<td>dc</td>
<td>Ù</td>
<td>%dc</td>
</tr>
<tr>
<td>221</td>
<td>dd</td>
<td>Ý</td>
<td>%dd</td>
</tr>
<tr>
<td>222</td>
<td>de</td>
<td>Þ</td>
<td>%de</td>
</tr>
<tr>
<td>HTML</td>
<td>223</td>
<td>df</td>
<td>ß</td>
</tr>
<tr>
<td>------</td>
<td>-----</td>
<td>----</td>
<td>---</td>
</tr>
<tr>
<td>224</td>
<td>e0</td>
<td>à</td>
<td></td>
</tr>
<tr>
<td>225</td>
<td>e1</td>
<td>á</td>
<td></td>
</tr>
<tr>
<td>226</td>
<td>e2</td>
<td>à</td>
<td></td>
</tr>
<tr>
<td>227</td>
<td>e3</td>
<td>ã</td>
<td></td>
</tr>
<tr>
<td>228</td>
<td>e4</td>
<td>ä</td>
<td></td>
</tr>
<tr>
<td>229</td>
<td>e5</td>
<td>à</td>
<td></td>
</tr>
<tr>
<td>230</td>
<td>e6</td>
<td>æ</td>
<td></td>
</tr>
<tr>
<td>231</td>
<td>e7</td>
<td>ç</td>
<td></td>
</tr>
<tr>
<td>232</td>
<td>e8</td>
<td>è</td>
<td></td>
</tr>
<tr>
<td>233</td>
<td>e9</td>
<td>é</td>
<td></td>
</tr>
<tr>
<td>234</td>
<td>ea</td>
<td>è</td>
<td></td>
</tr>
<tr>
<td>235</td>
<td>eb</td>
<td>ë</td>
<td></td>
</tr>
<tr>
<td>236</td>
<td>ec</td>
<td>ì</td>
<td></td>
</tr>
<tr>
<td>237</td>
<td>ed</td>
<td>í</td>
<td></td>
</tr>
<tr>
<td>238</td>
<td>ee</td>
<td>î</td>
<td></td>
</tr>
<tr>
<td>239</td>
<td>ef</td>
<td>ì</td>
<td></td>
</tr>
<tr>
<td>240</td>
<td>f0</td>
<td>ò</td>
<td></td>
</tr>
</tbody>
</table>
### Reserved Characters Encoding

Following is the table to be used to encode reserved characters.

<table>
<thead>
<tr>
<th>Decimal</th>
<th>Hex Value</th>
<th>Char</th>
<th>URL Encode</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>24</td>
<td>$</td>
<td>%24</td>
</tr>
<tr>
<td>Decimal</td>
<td>Hex Value</td>
<td>Char</td>
<td>URL Encode</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
<td>------</td>
<td>------------</td>
</tr>
<tr>
<td>32</td>
<td>20</td>
<td>space</td>
<td>%20</td>
</tr>
<tr>
<td>34</td>
<td>22</td>
<td>&quot;</td>
<td>%22</td>
</tr>
<tr>
<td>60</td>
<td>3c</td>
<td>&lt;</td>
<td>%3c</td>
</tr>
<tr>
<td>62</td>
<td>3e</td>
<td>&gt;</td>
<td>%3e</td>
</tr>
<tr>
<td>35</td>
<td>23</td>
<td>#</td>
<td>%23</td>
</tr>
<tr>
<td>37</td>
<td>25</td>
<td>%</td>
<td>%25</td>
</tr>
<tr>
<td>123</td>
<td>7b</td>
<td>{</td>
<td>%7b</td>
</tr>
<tr>
<td>125</td>
<td>7d</td>
<td>}</td>
<td>%7d</td>
</tr>
<tr>
<td>124</td>
<td>7c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>92</td>
<td>5c</td>
<td>\</td>
<td>%5c</td>
</tr>
<tr>
<td>94</td>
<td>5e</td>
<td>^</td>
<td>%5e</td>
</tr>
</tbody>
</table>

**Unsafe Characters Encoding**

Following is the table to be used to encode unsafe characters.
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>126</td>
<td>7e</td>
<td>~</td>
<td>%7e</td>
</tr>
<tr>
<td>91</td>
<td>5b</td>
<td>[</td>
<td>%5b</td>
</tr>
<tr>
<td>93</td>
<td>5d</td>
<td>]</td>
<td>%5d</td>
</tr>
<tr>
<td>96</td>
<td>60</td>
<td>`</td>
<td>%60</td>
</tr>
</tbody>
</table>
The following is a draft list of language code correspondences between ISO codes, Microsoft codes, and Macintosh codes. Source of this information is [Unicode Consortium](https://www.unicode.org).

### Language Codes: ISO 639, Microsoft

<table>
<thead>
<tr>
<th>Language</th>
<th>ISO Code</th>
<th>Windows Name</th>
<th>Win Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abkhazian</td>
<td>ab</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afar</td>
<td>aa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afrikaans</td>
<td>af</td>
<td>LANG_AFRIKAANS</td>
<td>0x36</td>
</tr>
<tr>
<td>Albanian</td>
<td>sq</td>
<td>LANG_ALBANIAN</td>
<td>0x1c</td>
</tr>
<tr>
<td>Amharic</td>
<td>am</td>
<td>(no constant defined)</td>
<td>0x5e</td>
</tr>
<tr>
<td>Arabic</td>
<td>ar</td>
<td>LANG_ARABIC</td>
<td>0x01</td>
</tr>
<tr>
<td>Armenian</td>
<td>hy</td>
<td>LANG_ARMENIAN</td>
<td>0x2b</td>
</tr>
<tr>
<td>Assamese</td>
<td>as</td>
<td>LANG_ASSAMESE</td>
<td>0x4d</td>
</tr>
<tr>
<td>Aymara</td>
<td>ay</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Azerbaijani</td>
<td>az</td>
<td>LANG_AZERI</td>
<td>0x2c</td>
</tr>
<tr>
<td>Bashkir</td>
<td>ba</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basque</td>
<td>eu</td>
<td>LANG_BASQUE</td>
<td>0x2d</td>
</tr>
<tr>
<td>Bengali (Bangla)</td>
<td>bn</td>
<td>LANG_BENGALI</td>
<td>0x45</td>
</tr>
<tr>
<td>Bhutani</td>
<td>dz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bihari</td>
<td>bh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bislama</td>
<td>bi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td>Code</td>
<td>Constant</td>
<td>Value</td>
</tr>
<tr>
<td>--------------------------</td>
<td>------</td>
<td>-------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Breton</td>
<td>br</td>
<td>LANG_BRETON</td>
<td></td>
</tr>
<tr>
<td>Bulgarian</td>
<td>bg</td>
<td>LANG_BULGARIAN</td>
<td>0x02</td>
</tr>
<tr>
<td>Burmese</td>
<td>my</td>
<td>(no constant defined)</td>
<td>0x55</td>
</tr>
<tr>
<td>Byelorussian (Belarusian)</td>
<td>be</td>
<td>LANG_BELARUSIAN</td>
<td>0x23</td>
</tr>
<tr>
<td>Cambodian</td>
<td>km</td>
<td>(no constant defined)</td>
<td>0x53</td>
</tr>
<tr>
<td>Catalan</td>
<td>ca</td>
<td>LANG_CATALAN</td>
<td>0x03</td>
</tr>
<tr>
<td>Cherokee</td>
<td></td>
<td>(no constant defined)</td>
<td>0x5c</td>
</tr>
<tr>
<td>Chewa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chinese (Simplified)</td>
<td>zh</td>
<td>LANG_CHINESE</td>
<td>0x04</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(SUBLANG_CHINESE_SIMPLIFIED)</td>
<td>0x0404</td>
</tr>
<tr>
<td>Chinese (Traditional)</td>
<td>zh</td>
<td>LANG_CHINESE</td>
<td>0x04</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(SUBLANG_CHINESE_TRADITIONAL)</td>
<td>0x0404</td>
</tr>
<tr>
<td>Corsican</td>
<td>co</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Croatian</td>
<td>hr</td>
<td>LANG_CROATIAN</td>
<td>0x1a</td>
</tr>
<tr>
<td>Czech</td>
<td>cs</td>
<td>LANG_CZECH</td>
<td>0x05</td>
</tr>
<tr>
<td>Danish</td>
<td>da</td>
<td>LANG_DANISH</td>
<td>0x06</td>
</tr>
<tr>
<td>Divehi</td>
<td></td>
<td>LANG_DIVEHI</td>
<td>0x65</td>
</tr>
<tr>
<td>Dutch</td>
<td>nl</td>
<td>LANG_DUTCH</td>
<td>0x13</td>
</tr>
<tr>
<td>Edo</td>
<td></td>
<td>(no constant defined)</td>
<td>0x66</td>
</tr>
<tr>
<td>English</td>
<td>en</td>
<td>LANG_ENGLISH</td>
<td>0x09</td>
</tr>
<tr>
<td>Esperanto</td>
<td>eo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estonian</td>
<td>et</td>
<td>LANG_ESTONIAN</td>
<td>0x25</td>
</tr>
<tr>
<td>Faeroese</td>
<td>fo</td>
<td>LANG_FAEROESE</td>
<td>0x38</td>
</tr>
<tr>
<td>Farsi</td>
<td>fa</td>
<td>LANG_FARSI</td>
<td>0x29</td>
</tr>
<tr>
<td>Language</td>
<td>Code</td>
<td>Description</td>
<td>Language Constant</td>
</tr>
<tr>
<td>--------------</td>
<td>------</td>
<td>--------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Fiji</td>
<td>fj</td>
<td>Language of Fiji</td>
<td>LANG_FINNISH</td>
</tr>
<tr>
<td>Finnish</td>
<td>fi</td>
<td>Language of Finnish</td>
<td>LANG_FINNISH</td>
</tr>
<tr>
<td>Flemish</td>
<td></td>
<td>Language of Belgian Dutch</td>
<td>LANG_DUTCH</td>
</tr>
<tr>
<td>French</td>
<td>fr</td>
<td>Language of French</td>
<td>LANG_FRENCH</td>
</tr>
<tr>
<td>Frisian</td>
<td>fy</td>
<td>Language of Frisian</td>
<td>(no constant defined)</td>
</tr>
<tr>
<td>Fulfulde</td>
<td></td>
<td>Language of Fulfulde</td>
<td>(no constant defined)</td>
</tr>
<tr>
<td>Galician</td>
<td>gl</td>
<td>Language of Galician</td>
<td>LANG_GALICIAN</td>
</tr>
<tr>
<td>Gaelic (Scottish)</td>
<td>gd</td>
<td>Language of Gaelic (Scottish)</td>
<td>(no constant defined)</td>
</tr>
<tr>
<td>Gaelic (Manx)</td>
<td>gv</td>
<td>Language of Gaelic (Manx)</td>
<td></td>
</tr>
<tr>
<td>Georgian</td>
<td>ka</td>
<td>Language of Georgian</td>
<td>LANG_GEORGIAN</td>
</tr>
<tr>
<td>German</td>
<td>de</td>
<td>Language of German</td>
<td>LANG_GERMAN</td>
</tr>
<tr>
<td>Greek</td>
<td>el</td>
<td>Language of Greek</td>
<td>LANG_GREEK</td>
</tr>
<tr>
<td>Greenlandic</td>
<td>kl</td>
<td>Language of Greenlandic</td>
<td>LANG_ICELANDIC</td>
</tr>
<tr>
<td>Guarani</td>
<td>gn</td>
<td>Language of Guarani</td>
<td>(no constant defined)</td>
</tr>
<tr>
<td>Gujarati</td>
<td>gu</td>
<td>Language of Gujarati</td>
<td>LANG_GUJARATI</td>
</tr>
<tr>
<td>Hausa</td>
<td>ha</td>
<td>Language of Hausa</td>
<td>(no constant defined)</td>
</tr>
<tr>
<td>Hawaiian</td>
<td></td>
<td>Language of Hawaiian</td>
<td>(no constant defined)</td>
</tr>
<tr>
<td>Hebrew</td>
<td>he,</td>
<td>Language of Hebrew</td>
<td>LANG_HEBREW</td>
</tr>
<tr>
<td>Hindi</td>
<td>hi</td>
<td>Language of Hindi</td>
<td>LANG_HINDI</td>
</tr>
<tr>
<td>Hungarian</td>
<td>hu</td>
<td>Language of Hungarian</td>
<td>LANG_HUNGARIAN</td>
</tr>
<tr>
<td>Ibibio</td>
<td></td>
<td>Language of Ibibio</td>
<td>(no constant defined)</td>
</tr>
<tr>
<td>Icelandic</td>
<td>is</td>
<td>Language of Icelandic</td>
<td>LANG_ICELANDIC</td>
</tr>
<tr>
<td>Language</td>
<td>Code</td>
<td>Constant Name</td>
<td>Codepoint</td>
</tr>
<tr>
<td>-------------------</td>
<td>------</td>
<td>--------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Igbo</td>
<td></td>
<td>(no constant defined)</td>
<td>0x70</td>
</tr>
<tr>
<td>Indonesian</td>
<td>id, in*</td>
<td>LANG_INDOONESIAN</td>
<td>0x21</td>
</tr>
<tr>
<td>Interlingua</td>
<td>ia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interlingue</td>
<td>ie</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inuktitut</td>
<td>iu</td>
<td>(no constant defined)</td>
<td>0x5d</td>
</tr>
<tr>
<td>Inupiak</td>
<td>ik</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irish</td>
<td>ga</td>
<td>(no constant defined)</td>
<td>0x3c (0x083c)</td>
</tr>
<tr>
<td>Italian</td>
<td>it</td>
<td>LANG_ITAL</td>
<td>0x10</td>
</tr>
<tr>
<td>Japanese</td>
<td>ja</td>
<td>LANG_JAPANESE</td>
<td>0x11</td>
</tr>
<tr>
<td>Javanese</td>
<td>jv</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kannada</td>
<td>kn</td>
<td>LANG_KANNADA</td>
<td>0x4b</td>
</tr>
<tr>
<td>Kanuri</td>
<td></td>
<td>(no constant defined)</td>
<td>0x71</td>
</tr>
<tr>
<td>Kashmiri</td>
<td>ks</td>
<td>LANG_KASHMIRI</td>
<td>0x60</td>
</tr>
<tr>
<td>Kazakh</td>
<td>kk</td>
<td>LANG_KAZAK</td>
<td>0x3f</td>
</tr>
<tr>
<td>Kinyarwanda (Ruanda)</td>
<td></td>
<td>LANG_KAZAK</td>
<td></td>
</tr>
<tr>
<td>Kirghiz</td>
<td>ky</td>
<td>LANG_KYRGYZ</td>
<td>0x40</td>
</tr>
<tr>
<td>Kirundi (Rundi)</td>
<td>rn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Konkani</td>
<td></td>
<td>LANG_KONKANI</td>
<td>0x57</td>
</tr>
<tr>
<td>Korean</td>
<td>ko</td>
<td>LANG_KOREAN</td>
<td>0x12</td>
</tr>
<tr>
<td>Kurdish</td>
<td>ku</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laothian</td>
<td>lo</td>
<td>(no constant defined)</td>
<td>0x54</td>
</tr>
<tr>
<td>Latin</td>
<td>la</td>
<td>(no constant defined)</td>
<td>0x76</td>
</tr>
<tr>
<td>Language</td>
<td>Code</td>
<td>Constant</td>
<td>Value</td>
</tr>
<tr>
<td>-------------------</td>
<td>------</td>
<td>----------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Latvian (Lettish)</td>
<td>lv</td>
<td>LANG_LATVIAN</td>
<td>0x26</td>
</tr>
<tr>
<td>Limburgish (Limburger)</td>
<td>li</td>
<td>LANG_LIMBURGER</td>
<td></td>
</tr>
<tr>
<td>Lingala</td>
<td>ln</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lithuanian</td>
<td>lt</td>
<td>LANG_LITHUANIAN</td>
<td>0x27</td>
</tr>
<tr>
<td>Macedonian</td>
<td>mk</td>
<td>LANG_MACEDONIAN</td>
<td>0x2f</td>
</tr>
<tr>
<td>Malagasy</td>
<td>mg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malay</td>
<td>ms</td>
<td>LANG_MALAY</td>
<td>0x3e</td>
</tr>
<tr>
<td>Malayalam</td>
<td>ml</td>
<td>LANG_MALAYALAM</td>
<td>0x4c</td>
</tr>
<tr>
<td>Maltese</td>
<td>mt</td>
<td>(no constant defined)</td>
<td>0x3a</td>
</tr>
<tr>
<td>Maori</td>
<td>mi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marathi</td>
<td>mr</td>
<td>LANG_MARATHI</td>
<td>0x4e</td>
</tr>
<tr>
<td>Moldavian</td>
<td>mo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mongolian</td>
<td>mn</td>
<td>LANG_MONGOLIAN</td>
<td>0x50</td>
</tr>
<tr>
<td>Nauru</td>
<td>na</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nepali</td>
<td>ne</td>
<td>LANG_NEPALI</td>
<td>0x61</td>
</tr>
<tr>
<td>Norwegian</td>
<td>no</td>
<td>LANG_NORWEGIAN</td>
<td>0x14</td>
</tr>
<tr>
<td>Occitan</td>
<td>oc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oriya</td>
<td>or</td>
<td>LANG_ORIYA</td>
<td>0x48</td>
</tr>
<tr>
<td>Oromo (Afan, Galla)</td>
<td>om</td>
<td>(no constant defined)</td>
<td>0x72</td>
</tr>
<tr>
<td>Papiamentu</td>
<td></td>
<td>(no constant defined)</td>
<td>0x79</td>
</tr>
<tr>
<td>Pashto (Pushto)</td>
<td>ps</td>
<td>(no constant defined)</td>
<td>0x63</td>
</tr>
<tr>
<td>Language</td>
<td>Code</td>
<td>Constant Description</td>
<td>Constant Value</td>
</tr>
<tr>
<td>-------------------</td>
<td>------</td>
<td>----------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Polish</td>
<td>pl</td>
<td>LANG_POLISH</td>
<td>0x15</td>
</tr>
<tr>
<td>Portuguese</td>
<td>pt</td>
<td>LANG_PORTUGUESE</td>
<td>0x16</td>
</tr>
<tr>
<td>Punjabi</td>
<td>pa</td>
<td>LANG_PUNJABI</td>
<td>0x46</td>
</tr>
<tr>
<td>Quechua</td>
<td>qu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rhaeto-Romance</td>
<td>rm</td>
<td>(no constant defined)</td>
<td>0x17</td>
</tr>
<tr>
<td>Romanian</td>
<td>ro</td>
<td>LANG_ROMANIAN</td>
<td>0x18</td>
</tr>
<tr>
<td>Russian</td>
<td>ru</td>
<td>LANG RUSSIAN</td>
<td>0x19</td>
</tr>
<tr>
<td>Sami (Lappish)</td>
<td></td>
<td>(no constant defined)</td>
<td>0x3b</td>
</tr>
<tr>
<td>Samoan</td>
<td>sm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sangro</td>
<td>sg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanskrit</td>
<td>sa</td>
<td>LANG_SANSKRIT</td>
<td>0x4f</td>
</tr>
<tr>
<td>Serbian</td>
<td>sr</td>
<td>LANG SERBIAN (SUBLANG_SERBIAN_LATIN or SUBLANG_SERBIAN_CYRILLIC)</td>
<td>0x1a (0x081a or 0x0c1a)</td>
</tr>
<tr>
<td>Serbo-Croatian</td>
<td>sh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sesotho</td>
<td>st</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Setswana</td>
<td>tn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shona</td>
<td>sn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sindhi</td>
<td>sd</td>
<td>LANG_SINDHI</td>
<td>0x59</td>
</tr>
<tr>
<td>Sinhalese</td>
<td>si</td>
<td>(no constant defined)</td>
<td>0x5b</td>
</tr>
<tr>
<td>Siswati</td>
<td>ss</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovak</td>
<td>sk</td>
<td>LANG_SLOVAK</td>
<td>0x1b</td>
</tr>
<tr>
<td>Slovenian</td>
<td>sl</td>
<td>LANG_SLOVENIAN</td>
<td>0x24</td>
</tr>
<tr>
<td>Somali</td>
<td>so</td>
<td>(no constant defined)</td>
<td>0x77</td>
</tr>
<tr>
<td>Language</td>
<td>Code</td>
<td>Constant</td>
<td>Hex</td>
</tr>
<tr>
<td>------------------------</td>
<td>------</td>
<td>-------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Spanish</td>
<td>es</td>
<td>LANGSPANISH</td>
<td>0x0a</td>
</tr>
<tr>
<td>Sundanese</td>
<td>su</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swahili (Kiswahili)</td>
<td>sw</td>
<td>LANGSWAHILI</td>
<td>0x41</td>
</tr>
<tr>
<td>Swedish</td>
<td>sv</td>
<td>LANGSWEDISH</td>
<td>0x1d</td>
</tr>
<tr>
<td>Syriac</td>
<td></td>
<td>LANGSYRIAC</td>
<td>0x5a</td>
</tr>
<tr>
<td>Tagalog</td>
<td>tl</td>
<td>(no constant defined)</td>
<td>0x64</td>
</tr>
<tr>
<td>Tajik</td>
<td>tg</td>
<td>(no constant defined)</td>
<td>0x28</td>
</tr>
<tr>
<td>Tamazight</td>
<td></td>
<td>(no constant defined)</td>
<td>0x5f</td>
</tr>
<tr>
<td>Tamil</td>
<td>ta</td>
<td>LANGTAMIL</td>
<td>0x49</td>
</tr>
<tr>
<td>Tatar</td>
<td>tt</td>
<td>LANGTATAR</td>
<td>0x44</td>
</tr>
<tr>
<td>Telugu</td>
<td>te</td>
<td>LANGTELUGU</td>
<td>0x4a</td>
</tr>
<tr>
<td>Thai</td>
<td>th</td>
<td>LANGTHAI</td>
<td>0x1e</td>
</tr>
<tr>
<td>Tibetan</td>
<td>bo</td>
<td>(no constant defined)</td>
<td>0x51</td>
</tr>
<tr>
<td>Tigrinya</td>
<td>ti</td>
<td>(no constant defined)</td>
<td>0x73</td>
</tr>
<tr>
<td>Tonga</td>
<td>to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tsonga</td>
<td>ts</td>
<td>(no constant defined)</td>
<td>0x31</td>
</tr>
<tr>
<td>Turkish</td>
<td>tr</td>
<td>LANGTURKISH</td>
<td>0x1f</td>
</tr>
<tr>
<td>Turkmen</td>
<td>tk</td>
<td>(no constant defined)</td>
<td>0x42</td>
</tr>
<tr>
<td>Twi</td>
<td>tw</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uighur</td>
<td>ug</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ukrainian</td>
<td>uk</td>
<td>LANGUKRAINIAN</td>
<td>0x22</td>
</tr>
<tr>
<td>Urdu</td>
<td>ur</td>
<td>LANGURDU</td>
<td>0x20</td>
</tr>
<tr>
<td>Uzbek</td>
<td>uz</td>
<td>LANGUZBEK</td>
<td>0x43</td>
</tr>
</tbody>
</table>
### Language Codes: ISO 639, Macintosh

<table>
<thead>
<tr>
<th>Language</th>
<th>ISO Code</th>
<th>Mac Name</th>
<th>Mac Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abkhazian</td>
<td>ab</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afar</td>
<td>aa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afrikaans</td>
<td>af</td>
<td>langAfricaans</td>
<td>141</td>
</tr>
<tr>
<td>Albanian</td>
<td>sq</td>
<td>langAlbanian</td>
<td>36</td>
</tr>
<tr>
<td>Amharic</td>
<td>am</td>
<td>langAmharic</td>
<td>85</td>
</tr>
<tr>
<td>Arabic</td>
<td>ar</td>
<td>langArabic</td>
<td>12</td>
</tr>
<tr>
<td>Armenian</td>
<td>hy</td>
<td>langArmenian</td>
<td>51</td>
</tr>
<tr>
<td>Assamese</td>
<td>as</td>
<td>langAssamese</td>
<td>68</td>
</tr>
<tr>
<td>Aymara</td>
<td>ay</td>
<td>langAymara</td>
<td>134</td>
</tr>
<tr>
<td>Azerbaijani</td>
<td>az</td>
<td>langAzerbaijani(Cyrllic), langAzerbaijanAr(Arabic)</td>
<td>49(C), 50(A)</td>
</tr>
<tr>
<td>Language</td>
<td>Code</td>
<td>Language Code</td>
<td>Language</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>Bashkir</td>
<td>ba</td>
<td>langBasque</td>
<td>129</td>
</tr>
<tr>
<td>Basque</td>
<td>eu</td>
<td>langBasque</td>
<td>129</td>
</tr>
<tr>
<td>Bengali (Bangla)</td>
<td>bn</td>
<td>langBengali</td>
<td>67</td>
</tr>
<tr>
<td>Bhutani</td>
<td>dz</td>
<td>langDzongkha</td>
<td>137</td>
</tr>
<tr>
<td>Bihari</td>
<td>bh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bislama</td>
<td>bi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breton</td>
<td>br</td>
<td>langBreton</td>
<td>142</td>
</tr>
<tr>
<td>Bulgarian</td>
<td>bg</td>
<td>langBulgarian</td>
<td>44</td>
</tr>
<tr>
<td>Burmese</td>
<td>my</td>
<td>langBurmese</td>
<td>77</td>
</tr>
<tr>
<td>Byelorussian (Belarusian)</td>
<td>be</td>
<td>langByelorussian</td>
<td>46</td>
</tr>
<tr>
<td>Cambodian</td>
<td>km</td>
<td>langKhmer</td>
<td>78</td>
</tr>
<tr>
<td>Catalan</td>
<td>ca</td>
<td>langCatalan</td>
<td>130</td>
</tr>
<tr>
<td>Cherokee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chewa</td>
<td>zh</td>
<td>langChewa</td>
<td>92</td>
</tr>
<tr>
<td>Chinese (Simplified)</td>
<td>zh</td>
<td>langSimpChinese</td>
<td>33</td>
</tr>
<tr>
<td>Chinese (Traditional)</td>
<td>zh</td>
<td>langTradChinese</td>
<td>19</td>
</tr>
<tr>
<td>Corsican</td>
<td>co</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Croatian</td>
<td>hr</td>
<td>langCroatian</td>
<td>18</td>
</tr>
<tr>
<td>Czech</td>
<td>cs</td>
<td>langCzech</td>
<td>38</td>
</tr>
<tr>
<td>Danish</td>
<td>da</td>
<td>langDanish</td>
<td>7</td>
</tr>
<tr>
<td>Divehi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dutch</td>
<td>nl</td>
<td>langDutch</td>
<td>4</td>
</tr>
<tr>
<td>Language</td>
<td>Code</td>
<td>Language Code</td>
<td>Language Name</td>
</tr>
<tr>
<td>--------------</td>
<td>------</td>
<td>---------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>Edo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>en</td>
<td>langEnglish</td>
<td>0</td>
</tr>
<tr>
<td>Esperanto</td>
<td>eo</td>
<td>langEsperanto</td>
<td>94</td>
</tr>
<tr>
<td>Estonian</td>
<td>et</td>
<td>langEstonian</td>
<td>27</td>
</tr>
<tr>
<td>Faeroese</td>
<td>fo</td>
<td>langFaeroese</td>
<td>30</td>
</tr>
<tr>
<td>Farsi</td>
<td>fa</td>
<td>langFarsi, langPersian</td>
<td>31</td>
</tr>
<tr>
<td>Fiji</td>
<td>fj</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finnish</td>
<td>fi</td>
<td>langFinnish</td>
<td>13</td>
</tr>
<tr>
<td>Flemish</td>
<td></td>
<td>langFlemish</td>
<td>34</td>
</tr>
<tr>
<td>French</td>
<td>fr</td>
<td>langFrench</td>
<td>1</td>
</tr>
<tr>
<td>Frisian</td>
<td>fy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fulfulde</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Galician</td>
<td>gl</td>
<td>langGalician</td>
<td>140</td>
</tr>
<tr>
<td>Gaelic (Scottish)</td>
<td>gd</td>
<td>langScottishGaelic</td>
<td>144</td>
</tr>
<tr>
<td>Gaelic (Manx)</td>
<td>gv</td>
<td>langManxGaelic</td>
<td>145</td>
</tr>
<tr>
<td>Georgian</td>
<td>ka</td>
<td>langGeorgian</td>
<td>52</td>
</tr>
<tr>
<td>German</td>
<td>de</td>
<td>langGerman</td>
<td>2</td>
</tr>
<tr>
<td>Greek</td>
<td>el</td>
<td>langGreek (monotonic), langGreekPoly (polytonic)</td>
<td>14(m), 148(p)</td>
</tr>
<tr>
<td>Greenlandic</td>
<td>kl</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guarani</td>
<td>gn</td>
<td>langGuarani</td>
<td>133</td>
</tr>
<tr>
<td>Gujarati</td>
<td>gu</td>
<td>langGujarati</td>
<td>69</td>
</tr>
<tr>
<td>Hausa</td>
<td>ha</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hawaiian</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td>Code</td>
<td>Lang</td>
<td>Count</td>
</tr>
<tr>
<td>-------------------</td>
<td>------</td>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td>Hebrew</td>
<td>he, iw*</td>
<td>langHebrew</td>
<td>10</td>
</tr>
<tr>
<td>Hindi</td>
<td>hi</td>
<td>langHindi</td>
<td>21</td>
</tr>
<tr>
<td>Hungarian</td>
<td>hu</td>
<td>langHungarian</td>
<td>26</td>
</tr>
<tr>
<td>Ibibio</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Icelandic</td>
<td>is</td>
<td>langIcelandic</td>
<td>15</td>
</tr>
<tr>
<td>Igbo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesian</td>
<td>id, in*</td>
<td>langIndonesian</td>
<td>81</td>
</tr>
<tr>
<td>Interlingua</td>
<td>ia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interlingue</td>
<td>ie</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inuktitut</td>
<td>iu</td>
<td>langInuktitut</td>
<td>143</td>
</tr>
<tr>
<td>Inupiak</td>
<td>ik</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irish</td>
<td>ga</td>
<td>langIrishGaelic (normal), langIrishGaelicScr (dots above)</td>
<td>35, 146</td>
</tr>
<tr>
<td>Italian</td>
<td>it</td>
<td>langItalian</td>
<td>3</td>
</tr>
<tr>
<td>Japanese</td>
<td>ja</td>
<td>langJapanese</td>
<td>11</td>
</tr>
<tr>
<td>Javanese</td>
<td>jv</td>
<td>langJavaneseRom</td>
<td>138</td>
</tr>
<tr>
<td>Kannada</td>
<td>kn</td>
<td>langKannada</td>
<td>73</td>
</tr>
<tr>
<td>Kanuri</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kashmiri</td>
<td>ks</td>
<td>langKashmiri</td>
<td>61</td>
</tr>
<tr>
<td>Kazakh</td>
<td>kk</td>
<td>langKazakh</td>
<td>48</td>
</tr>
<tr>
<td>Kinyarwanda (Ruanda)</td>
<td>rw</td>
<td>langKinyarwanda (langRuanda)</td>
<td>90</td>
</tr>
<tr>
<td>Kirghiz</td>
<td>ky</td>
<td>langKirghiz</td>
<td>54</td>
</tr>
<tr>
<td>Kirundi (Rundi)</td>
<td>rn</td>
<td>langRundi</td>
<td>91</td>
</tr>
<tr>
<td>Language</td>
<td>ISO 639-1</td>
<td>ISO 639-3</td>
<td>Code</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
<td>-----------</td>
<td>--------</td>
</tr>
<tr>
<td>Konkani</td>
<td>ko</td>
<td>langKorean</td>
<td>23</td>
</tr>
<tr>
<td>Korean</td>
<td>ko</td>
<td>langKorean</td>
<td>23</td>
</tr>
<tr>
<td>Kurdish</td>
<td>ku</td>
<td>langKurdish</td>
<td>60</td>
</tr>
<tr>
<td>Laothian</td>
<td>lo</td>
<td>langLao</td>
<td>79</td>
</tr>
<tr>
<td>Latin</td>
<td>la</td>
<td>langLatin</td>
<td>131</td>
</tr>
<tr>
<td>Latvian (Lettish)</td>
<td>lv</td>
<td>langLatvian</td>
<td>28</td>
</tr>
<tr>
<td>Limburgish (Limburger)</td>
<td>li</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lingala</td>
<td>ln</td>
<td>langLingala</td>
<td></td>
</tr>
<tr>
<td>Lithuanian</td>
<td>lt</td>
<td>langLithuanian</td>
<td>24</td>
</tr>
<tr>
<td>Macedonian</td>
<td>mk</td>
<td>langMacedonian</td>
<td>43</td>
</tr>
<tr>
<td>Malagasy</td>
<td>mg</td>
<td>langMalagasy</td>
<td>93</td>
</tr>
<tr>
<td>Malay</td>
<td>ms</td>
<td>langMalayRoman(Latin), langMalayArabic(Arabic)</td>
<td>83(L), 84(A)</td>
</tr>
<tr>
<td>Malayalam</td>
<td>ml</td>
<td>langMalayalam</td>
<td>72</td>
</tr>
<tr>
<td>Maltese</td>
<td>mt</td>
<td>langMaltese</td>
<td>16</td>
</tr>
<tr>
<td>Maori</td>
<td>mi</td>
<td>langMaori</td>
<td></td>
</tr>
<tr>
<td>Marathi</td>
<td>mr</td>
<td>langMarathi</td>
<td>66</td>
</tr>
<tr>
<td>Moldavian</td>
<td>mo</td>
<td>langMoldavian</td>
<td>53</td>
</tr>
<tr>
<td>Mongolian</td>
<td>mn</td>
<td>langMongolian(Mongolian), langMongolianCyr(Cyrillic)</td>
<td>57(M), 58(C)</td>
</tr>
<tr>
<td>Nauru</td>
<td>na</td>
<td>langNauru</td>
<td></td>
</tr>
<tr>
<td>Nepali</td>
<td>ne</td>
<td>langNepali</td>
<td>64</td>
</tr>
<tr>
<td>Norwegian</td>
<td>no</td>
<td>langNorwegian</td>
<td>9</td>
</tr>
<tr>
<td>Language</td>
<td>Code</td>
<td>Language Code</td>
<td>ISO Code</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------</td>
<td>---------------</td>
<td>----------</td>
</tr>
<tr>
<td>Occitan</td>
<td>oc</td>
<td>langOc</td>
<td></td>
</tr>
<tr>
<td>Oriya</td>
<td>or</td>
<td>langOriya</td>
<td>71</td>
</tr>
<tr>
<td>Oromo (Afan, Galla)</td>
<td>om</td>
<td>langOromo (langGalla)</td>
<td>87</td>
</tr>
<tr>
<td>Papiamentu</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pashto (Pushto)</td>
<td>ps</td>
<td>langPashto</td>
<td>59</td>
</tr>
<tr>
<td>Polish</td>
<td>pl</td>
<td>langPolish</td>
<td>25</td>
</tr>
<tr>
<td>Portuguese</td>
<td>pt</td>
<td>langPortuguese</td>
<td>8</td>
</tr>
<tr>
<td>Punjabi</td>
<td>pa</td>
<td>langPunjabi</td>
<td>70</td>
</tr>
<tr>
<td>Quechua</td>
<td>qu</td>
<td>langQuechua</td>
<td>132</td>
</tr>
<tr>
<td>Rhaeto-Romance</td>
<td>rm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romanian</td>
<td>ro</td>
<td>langRomanian</td>
<td>37</td>
</tr>
<tr>
<td>Russian</td>
<td>ru</td>
<td>langRussian</td>
<td>32</td>
</tr>
<tr>
<td>Sami (Lappish)</td>
<td></td>
<td>langSami (langLappish)</td>
<td>29</td>
</tr>
<tr>
<td>Samoan</td>
<td>sm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sangro</td>
<td>sg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanskrit</td>
<td>sa</td>
<td>langSanskrit</td>
<td>65</td>
</tr>
<tr>
<td>Serbian</td>
<td>sr</td>
<td>langSerbian</td>
<td>42</td>
</tr>
<tr>
<td>Serbo-Croatian</td>
<td>sh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sesotho</td>
<td>st</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Setswana</td>
<td>tn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shona</td>
<td>sn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sindhi</td>
<td>sd</td>
<td>langSindhi</td>
<td>62</td>
</tr>
<tr>
<td>Sinhalese</td>
<td>si</td>
<td>langSinhalese</td>
<td>76</td>
</tr>
<tr>
<td>Language</td>
<td>Code</td>
<td>Language Code</td>
<td>Language Name</td>
</tr>
<tr>
<td>-----------------</td>
<td>------</td>
<td>---------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Siswati</td>
<td>ss</td>
<td></td>
<td>langSiswati</td>
</tr>
<tr>
<td>Slovak</td>
<td>sk</td>
<td>langSlovak</td>
<td>39</td>
</tr>
<tr>
<td>Slovenian</td>
<td>sl</td>
<td>langSlovenian</td>
<td>40</td>
</tr>
<tr>
<td>Somali</td>
<td>so</td>
<td>langSomali</td>
<td>88</td>
</tr>
<tr>
<td>Spanish</td>
<td>es</td>
<td>langSpanish</td>
<td>6</td>
</tr>
<tr>
<td>Sundanese</td>
<td>su</td>
<td>langSundaneseRom</td>
<td>139</td>
</tr>
<tr>
<td>Swahili (Kiswahili)</td>
<td>sw</td>
<td>langSwahili</td>
<td>89</td>
</tr>
<tr>
<td>Swedish</td>
<td>sv</td>
<td>langSwedish</td>
<td>5</td>
</tr>
<tr>
<td>Syriac</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tagalog</td>
<td>tl</td>
<td>langTagalog</td>
<td>82</td>
</tr>
<tr>
<td>Tajik</td>
<td>tg</td>
<td>langTajiki</td>
<td>55</td>
</tr>
<tr>
<td>Tamazight</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tamil</td>
<td>ta</td>
<td>langTamil</td>
<td>74</td>
</tr>
<tr>
<td>Tatar</td>
<td>tt</td>
<td>langTatar</td>
<td>135</td>
</tr>
<tr>
<td>Telugu</td>
<td>te</td>
<td>langTelugu</td>
<td>75</td>
</tr>
<tr>
<td>Thai</td>
<td>th</td>
<td>langThai</td>
<td>22</td>
</tr>
<tr>
<td>Tibetan</td>
<td>bo</td>
<td>langTibetan</td>
<td>63</td>
</tr>
<tr>
<td>Tigrinya</td>
<td>ti</td>
<td>langTigrinya</td>
<td>86</td>
</tr>
<tr>
<td>Tonga</td>
<td>to</td>
<td>langTongan</td>
<td>147</td>
</tr>
<tr>
<td>Tsonga</td>
<td>ts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkish</td>
<td>tr</td>
<td>langTurkish</td>
<td>17</td>
</tr>
<tr>
<td>Turkmen</td>
<td>tk</td>
<td>langTurkmen</td>
<td>56</td>
</tr>
<tr>
<td>Twi</td>
<td>tw</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td>Code</td>
<td>Language Code</td>
<td>Code</td>
</tr>
<tr>
<td>------------</td>
<td>------</td>
<td>---------------</td>
<td>------</td>
</tr>
<tr>
<td>Uighur</td>
<td>ug</td>
<td>langUighur</td>
<td></td>
</tr>
<tr>
<td>Ukrainian</td>
<td>uk</td>
<td>langUkrainian</td>
<td></td>
</tr>
<tr>
<td>Urdu</td>
<td>ur</td>
<td>langUrdu</td>
<td></td>
</tr>
<tr>
<td>Uzbek</td>
<td>uz</td>
<td>langUzbek</td>
<td></td>
</tr>
<tr>
<td>Venda</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vietnamese</td>
<td>vi</td>
<td>langVietnamese</td>
<td></td>
</tr>
<tr>
<td>Volap?k</td>
<td>vo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Welsh</td>
<td>cy</td>
<td>langWelsh</td>
<td></td>
</tr>
<tr>
<td>Wolof</td>
<td>wo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Xhosa</td>
<td>xh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yiddish</td>
<td>yi,</td>
<td>langYiddish</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ji*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yoruba</td>
<td>yo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zulu</td>
<td>zu</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Character encoding is a method of converting bytes into characters. To validate or display an HTML document properly, a program must choose a proper character encoding.

The most common character set or character encoding in use on computers is ASCII - The American Standard Code for Information Interchange, and this is probably the most widely used character set for encoding text electronically.

ASCII encoding supports only the upper- and lowercase Latin alphabet, the numbers 0-9, and some extra characters which make a total of 128 characters in all. You can have a look at complete set of Printable ASCII Characters

However, many languages use either accented Latin characters or completely different alphabets. ASCII does not address these characters; therefore, you need to learn about character encodings if you want to use any non-ASCII characters.

The International Standards Organization created a range of character sets to deal with different national characters. For the documents in English and most other Western European languages, the widely supported encoding ISO-8859-1 is used.

Here is the list of Character Set being used around the world along with their description.

<table>
<thead>
<tr>
<th>Character Set</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO-8859-1</td>
<td>Latin alphabet part 1&lt;br&gt;Covering North America, Western Europe, Latin America, the Caribbean, Canada, Africa</td>
</tr>
<tr>
<td>ISO-8859-2</td>
<td>Latin alphabet part 2&lt;br&gt;Covering Eastern Europe</td>
</tr>
<tr>
<td>ISO-8859-3</td>
<td>Latin alphabet part 3&lt;br&gt;Covering SE Europe, Esperanto, miscellaneous others</td>
</tr>
<tr>
<td>ISO-8859-4</td>
<td>Latin alphabet part 4&lt;br&gt;Covering Scandinavia/Baltics (and others not in ISO-8859-1)</td>
</tr>
<tr>
<td>ISO-8859-5</td>
<td>Latin/Cyrillic alphabet part 5</td>
</tr>
<tr>
<td>ISO-8859-6</td>
<td>Latin/Arabic alphabet part 6</td>
</tr>
<tr>
<td>ISO-8859-7</td>
<td>Latin/Greek alphabet part 7</td>
</tr>
<tr>
<td>ISO-8859-8</td>
<td>Latin/Hebrew alphabet part 8</td>
</tr>
</tbody>
</table>
The Unicode Consortium was then set up to devise a way to show all characters of different languages, rather than have these different incompatible character codes for different languages.

Therefore, if you want to create documents that use characters from multiple character sets, you will be able to do so using the single Unicode character encodings.

Unicode therefore specifies encodings that can deal with a string in special ways so as to make enough space for the huge character set it encompasses. These are known as UTF-8, UTF-16, and UTF-32.

<table>
<thead>
<tr>
<th>Character Set</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTF-8</td>
<td>A Unicode Translation Format that comes in 8-bit units that is, it comes in bytes. A character in UTF8 can be from 1 to 4 bytes long, making UTF8 variable width.</td>
</tr>
<tr>
<td>UTF-16</td>
<td>A Unicode Translation Format that comes in 16-bit units that is, it comes in shorts. It can be 1 or 2 shorts long, making UTF16 variable width.</td>
</tr>
<tr>
<td>UTF-32</td>
<td>A Unicode Translation Format that comes in 32-bit units that is, it comes in longs. It is a fixed-width format and is always 1 &quot;long&quot; in length.</td>
</tr>
</tbody>
</table>

The first 256 characters of Unicode character sets correspond to the 256 characters of ISO-8859-1.

By default, HTML 4 processors should support UTF-8, and XML processors are supposed to support UTF-8 and UTF-16; therefore all XHTML-compliant processors should also support UTF-16.
A complete list of deprecated HTML tags and attributes are given here. All the tags have been ordered alphabetically along with their equivalent tag or alternate CSS option.

<table>
<thead>
<tr>
<th>Tag</th>
<th>Description</th>
<th>Alternate</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;applet&gt;</td>
<td>Deprecated. Specifies an applet</td>
<td>&lt;object&gt;</td>
</tr>
<tr>
<td>&lt;basefont&gt;</td>
<td>Deprecated. Specifies a base font</td>
<td></td>
</tr>
<tr>
<td>&lt;center&gt;</td>
<td>Deprecated. Specifies centered text</td>
<td>text-align</td>
</tr>
<tr>
<td>&lt;dir&gt;</td>
<td>Deprecated. Specifies a directory list</td>
<td></td>
</tr>
<tr>
<td>&lt;embed&gt;</td>
<td>Deprecated. Embeds an application in a document</td>
<td>&lt;object&gt;</td>
</tr>
<tr>
<td>&lt;font&gt;</td>
<td>Deprecated. Specifies text font, size, and color</td>
<td>font-family, font-size</td>
</tr>
<tr>
<td>&lt;isindex&gt;</td>
<td>Deprecated. Specifies a single-line input field</td>
<td></td>
</tr>
<tr>
<td>&lt;listing&gt;</td>
<td>Deprecated. Specifies listing of items</td>
<td>&lt;pre&gt;</td>
</tr>
<tr>
<td>&lt;menu&gt;</td>
<td>Deprecated. Specifies a menu list</td>
<td></td>
</tr>
<tr>
<td>&lt;plaintext&gt;</td>
<td>Deprecated. Specifies plaintext</td>
<td>&lt;pre&gt;</td>
</tr>
<tr>
<td>&lt;s&gt;</td>
<td>Deprecated. Specifies strikethrough text</td>
<td>text-decoration</td>
</tr>
<tr>
<td>&lt;strike&gt;</td>
<td>Deprecated. Specifies strikethrough text</td>
<td>text-decoration</td>
</tr>
<tr>
<td>&lt;u&gt;</td>
<td>Deprecated. Specifies underlined text</td>
<td>text-decoration</td>
</tr>
<tr>
<td>&lt;xmp&gt;</td>
<td>Deprecated. Specifies preformatted text</td>
<td>&lt;pre&gt;</td>
</tr>
</tbody>
</table>

**HTML Deprecated Attributes**

Following is the list of deprecated HTML attributes and alternative CSS options available.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
<th>Alternate</th>
</tr>
</thead>
<tbody>
<tr>
<td>align</td>
<td>Specifies positioning of an element</td>
<td>text-align, float &amp; vertical-align</td>
</tr>
<tr>
<td>Attribute</td>
<td>Description</td>
<td>Property</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td>----------</td>
</tr>
<tr>
<td>alink</td>
<td>Specifies the color of an active link or selected link</td>
<td>active</td>
</tr>
<tr>
<td>background</td>
<td>Specifies background image</td>
<td>background-image</td>
</tr>
<tr>
<td>bgcolor</td>
<td>Specifies background color</td>
<td>background-color</td>
</tr>
<tr>
<td>border</td>
<td>Specifies a border width of any element</td>
<td>border-width</td>
</tr>
<tr>
<td>clear</td>
<td>Indicates how the browser should display the line after the <code>&lt;br /&gt;</code> element</td>
<td>clear</td>
</tr>
<tr>
<td>height</td>
<td>Specifies height of body and other elements</td>
<td>height</td>
</tr>
<tr>
<td>hspace</td>
<td>Specifies the amount of whitespace or padding that should appear left or right an element</td>
<td>padding</td>
</tr>
<tr>
<td>language</td>
<td>Specifies scripting language being used</td>
<td>type</td>
</tr>
<tr>
<td>link</td>
<td>Specifies the default color of all links in the document</td>
<td>link</td>
</tr>
<tr>
<td>nowrap</td>
<td>Prevents the text from wrapping within that table cell</td>
<td>white-space</td>
</tr>
<tr>
<td>start</td>
<td>Indicates the number at which a browser should start numbering a list</td>
<td>counter-reset</td>
</tr>
<tr>
<td>text</td>
<td>Specifies color of body text</td>
<td>color</td>
</tr>
<tr>
<td>type</td>
<td>Specifies the type of list in <code>&lt;li&gt;</code> tag</td>
<td>list-style-type</td>
</tr>
<tr>
<td>vlink</td>
<td>Specifies the color of visited links</td>
<td>visited</td>
</tr>
<tr>
<td>vspace</td>
<td>Specifies the amount of whitespace or padding that should appear above or below an element</td>
<td>padding</td>
</tr>
<tr>
<td>width</td>
<td>Specifies width of body and other elements</td>
<td>width</td>
</tr>
</tbody>
</table>