

JAVA.LANG.CHARACTER.DIGIT METHOD

Description

The **java.lang.Character.digit** method returns the numeric value of the character ch in the specified radix.

If the radix is not in the range `MIN_RADIX ≤ radix ≤ MAX_RADIX` or if the value of ch is not a valid digit in the specified radix, -1 is returned. A character is a valid digit if at least one of the following is true:

- The method `isDigit` is true of the character and the Unicode decimal digit value of the character *or its single-character decomposition* is less than the specified radix. In this case the decimal digit value is returned.
- The character is one of the uppercase Latin letters 'A' through 'Z' and its code is less than radix + 'A' - 10. In this case, ch - 'A' + 10 is returned.
- The character is one of the lowercase Latin letters 'a' through 'z' and its code is less than radix + 'a' - 10. In this case, ch - 'a' + 10 is returned.
- The character is one of the fullwidth uppercase Latin letters A '\uFF21' through Z '\uFF3A' and its code is less than radix + '\uFF21' - 10. In this case, ch - '\uFF21' + 10 is returned.
- The character is one of the fullwidth lowercase Latin letters a '\uFF41' through z '\uFF5A' and its code is less than radix + '\uFF41' - 10. In this case, ch - '\uFF41' + 10 is returned.

Declaration

Following is the declaration for **java.lang.Character.digit** method

```
public static int digit(char ch, int radix)
```

Parameters

- **ch** - the character to be converted
- **radix** - the radix

Return Value

This method returns the numeric value represented by the character in the specified radix.

Exception

- **NA**

Example

The following example shows the usage of `lang.Character.digit` method.

```
package com.tutorialspoint;  
  
import java.lang.*;  
  
public class CharacterDemo {  
  
    public static void main(String[] args) {  
  
        // create 2 character primitives ch1, ch2
```

```
char ch1, ch2;

// assign values to ch1, ch2
ch1 = '9';
ch2 = '5';

// create 2 int primitives i1, i2
int i1, i2;

// assign numeric value of ch1, ch2 to i1, i2 using radix
i1 = Character.digit(ch1, 2);
i2 = Character.digit(ch2, 10);

String str1 = "Numeric value of " + ch1 + " in radix 2 is " + i1;
String str2 = "Numeric value of " + ch2 + " in radix 10 is " + i2;

// print i1, i2 values
System.out.println( str1 );
System.out.println( str2 );
}

}
```

Let us compile and run the above program, this will produce the following result:

```
Numeric value of 9 in radix 2 is -1
Numeric value of 5 in radix 10 is 5
Loading [MathJax]/jax/output/HTML-CSS/jax.js
```