JAVASCRIPT - NESTED FUNCTIONS

Prior to JavaScript 1.2, function definition was allowed only in top level global code, but JavaScript 1.2 allows function definitions to be nested within other functions as well. Still there is a restriction that function definitions may not appear within loops or conditionals. These restrictions on function definitions apply only to function declarations with the function statement.

As we'll discuss later in the next chapter, function literals $another feature introduced in JavaScript 1.2$ may appear within any JavaScript expression, which means that they can appear within **if** and other statements.

Example

Try the following example to learn how to implement nested functions.

```html
<html>
   <head>

      <script type="text/javascript">
         <!--
            function hypotenuse(a, b) {
               function square(x) { return x*x; }
               return Math.sqrt(square(a) + square(b));
            }

            function secondFunction(){
               var result;
               result = hypotenuse(1,2);
               document.write ( result );
            }
         //-->
      </script>

   </head>
   <body>
      <p>Click the following button to call the function</p>

      <form>
         <input type="button" onclick="secondFunction()" value="Call Function">
      </form>

      <p>Use different parameters inside the function and then try...</p>

   </body>
</html>
```
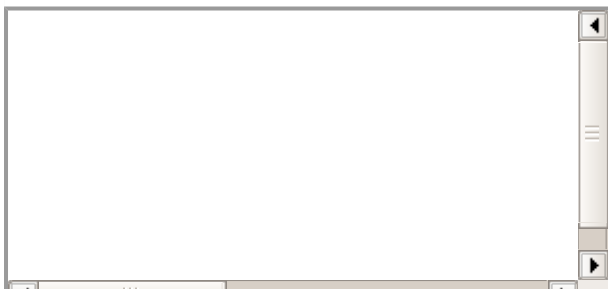
Output

Loading [MathJax]/jax/output/HTML-CSS/fonts/TeX/fontdata.js