

Tutorial 4c

JavaScript: *Built-in Objects*

Objective

After finishing this tutorial you should be able to apply the knowledge of built-in objects such as:

- Date object
- String object
- Math object

Preparing the Tutorial's Material

1. Create new folder
2. Download “Tutorial 4c – Material” and place it in the folder you have created before
3. Extract or unzip the file that you have downloaded (you can use WinZip) in the same folder

Date Object

1. Open file **T4c-1.html** using **Textpad**. Complete the file by typing the codes as below. When finished, preview it in your web browser and try to understand what the program is doing especially on the **bold** codes. Notes for reference → http://www.w3schools.com/js/js_obj_date.asp

```
<html>

<head>
  <title>Date Object</title>
</head>
<body>
  <script language="Javascript">
    var today = new Date();
    var day = today.getDate();
    var month = today.getMonth()+1;
    var year = today.getFullYear();
    var date = day+ "/" + month + "/" + year;
    var time = today.getHours() + ":" + today.getMinutes() + ":" + today.getSeconds();
    document.writeln("Current Date: <b>", date, "</b><br>");
    document.writeln("Current Time: <b>", time, "</b><br>");
  </script>
</body>
</html>
```

String Object

2. Open file **T4c-2.html** using **Textpad**. Complete the file by typing the codes as below. When finished, preview it in your web browser and try to understand what the program is doing especially on the **bold** codes. Notes for reference → http://www.w3schools.com/js/js_obj_string.asp

```
<html>
<head>
  <title>String Object</title>
</head>
<body>
  <script type = "text/javascript">
    var s = "ZEBRA"; var s2 = "AbCdEfG";
    document.writeln( "<p>Number of characters in '" + s + "' is " + s.length );
    document.writeln( "<p>Character at index 0 in '" + s + "' is " + s.charAt(0) );
    document.writeln( "<br />Character code at index 0 in '" + s + "' is " +
      s.charCodeAt(0) + "</p>" );
    document.writeln( "<p>' + String.fromCharCode(87, 79, 82, 68) +
      "' contains character codes 87, 79, 82 and 68</p>" );

    document.writeln( "<p>' + s2 + "' in lowercase is '" +
      s2.toLowerCase() + "'" );
    document.writeln( "<br />' + s2 + "' in uppercase is '" +
      s2.toUpperCase() + "'</p>" );
  </script>
</body>
</html>
```

Math Object

3. Open file **T4c-3.html** using **Textpad**. Complete the file by typing the codes as below. When finished, preview it in your web browser and try to understand what the program is doing especially on the **bold** codes. Notes for reference → http://www.w3schools.com/js/js_obj_math.asp

```
<html>
<head>
  <title>Math Object</title>
</head>
<body>
  <script type = "text/javascript">
    var input1, input2, input3;
    var value1, value2, value3;
    var maxValue;

    input1 = window.prompt( "Enter first number", "0" );
    input2 = window.prompt( "Enter second number", "0" );
    input3 = window.prompt( "Enter third number", "0" );

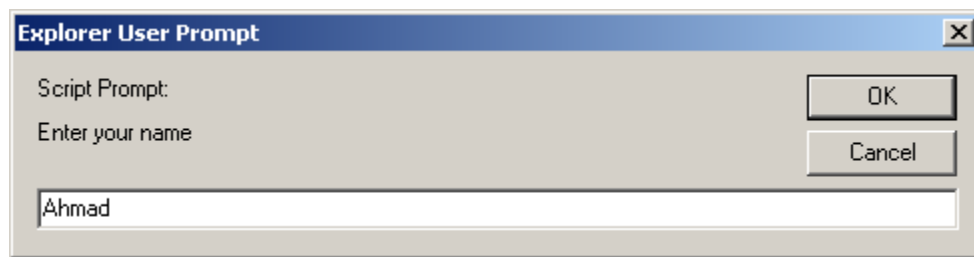
    value1 = parseFloat(input1);
    value2 = parseFloat(input2);
    value3 = parseFloat(input3);

    maxValue = Math.max( value1, Math.max( value2, value3) );

    document.writeln( "First number: " + value1 +
      "<br />Second number: " + value2 +
      "<br />Third number: " + value3 +
      "<br />Maximum is: " + maxValue );
  </script>
</body>
</html>
```

Do it yourself

- By using knowledge that you have acquired during this tutorial, complete file **T4c-4.html** to produce output as figures below:



Explorer User Prompt

Script Prompt:
Enter your name

Ahmad

OK Cancel



Explorer User Prompt

Script Prompt:
Enter the Year of Birth

1984

OK Cancel

