Tutorial 4e
Javascript: *Array Objects*

Objective:

The tutorial should help you to understand:

* `Array object`

Preparing the Tutorial:

1. Create a new *folder*.
2. *Download* "Tutorial 4e– Material" and place it within the created new *folder*.
3. *Extract* the *downloaded* file into the same folder.

Array Object:

1. Open the **T4e-1.html** file with the use of any text editor (e.g., Textpad). Complete the files with the following script. Once completed, *preview* the result in a *web browser* and try to understand how the scripts work. Pay attention to the **highlighted** text. The output should look like Figure 1.

```html
<html>
  <head> <title>Arrays</title></head>

 <body>

  <table border="1" cellspacing="0">
    <tr align="center">
      <th>Product's Name</th> <th>Unit Price <br>(RM)</th> <th> Quatity</th> <th> Price
<br> (RM)</th>
     </tr>

    <script language="Javascript">
      var products = new Array("Speaker", "Head phone", "Keyboard","Mouse");
      var prices= [7,15,12,30,10];  //another format for creating array

      var qty_count=0;
      var total_unitprice=0;
      var total_price=0;

      for (var i=0; i<products.length; i++)
      {
        total_unitprice += prices[i];

        document.writeln("<tr align='right'>");
        document.writeln("<td align='left'>", products[i],"</td>",
                    "<td>", prices[i],"</td>" );
        document.writeln("<td>", ' ', "</td>");
        document.writeln("<td>", ' ', "</td>");
        document.writeln("</tr>");
      }
    </script>

      <tr align="right">
         <th colspan="2" align="right">Total </th>
         <td> <script language="javascript"> </script> </td>
```

```
            <td> <script language="javascript"> </script> </td>
        </tr>
    </table>

    <br>
    The average of Unit Price: <b><font color="red">
    <script language="javascript"> document.writeln(total_unitprice/prices.length);</script>
    </font></b>
    </body>
</html>
```

2. After that, complete the JavaScript to answer the following questions. The final output should looks like Figure 2.

    a. Quantity for each product should be obtained from an array. Hint: Declare an array named quantity which contains the number of each product.
    b. This column is computed using the formula price = quantity * unit_price
    c. The sum of quantity of all products.
    d. The sum of price of all products.

    Hint: Apply loop and array to calculate Question b, c and d.

(a)   (b)

Product's Name	Unit Price (RM)	Quatity	Price (RM)
Speaker	7		
Head phone	15		
Keyboard	12		
Mouse	30		
	Total		

The average of Unit Price: **12.8**

Figure 1: Output for Question 1

Product's Name	Unit Price (RM)	Quatity	Price (RM)
Speaker	7	10	70
Head phone	15	30	450
Keyboard	12	25	300
Mouse	30	8	240
	Total	73	1060

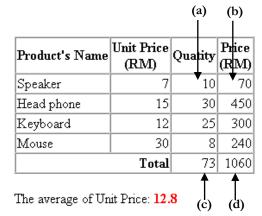The average of Unit Price: **12.8**

(c)   (d)

Figure 2: Output for Question 2

Tutorial Submission:

Place all the created files in a compressed/zipped file and submit it on the e-learning site. A dedicated submission link will be given for the submission.