Programming Concepts
Week 6 **Pass** Submission Tasks Template

Student ID: _____103055993_____

Student Name: _____Mario Stavreski_____

Pass Task 13 HTML code

Paste the HTML code of the web page here.

```html
1   <!DOCTYPE html>
2   <html lang="en">
3   <head>
4     <meta charset="utf-8" />
5     <meta name="description" content="for, while loops" />
6     <meta name="keywords"    content="javascript, for, while, loops, html" />
7     <meta name="author"      content="Mario Stavreski" />
8     <title>Loops</title>
9       <script src="w6P1.js"></script>
10  </head>
11  <body>
12  <header>
13      <h1> Pass Tasks Loops<h1>
14  </header>
15  <article>
16
17      <button type="button" id="forbutton"> List names using a for loop </button>
18      <button type="button" id="whilebutton"> List names using a while loop </button>
19      <button type="button" id="namelength"> Name length </button>
20
21      <p id="msg1"></p>
22      <p id="msg2"></p>
23      <p id="msg3"></p>
24
25  </article>
26  <footer><p>Produced by Mario Stavreski ID: 103055993</p></footer>
27  </body>
28  </html>
29
```

Pass Task 13 JavaScript code

Paste the JavaScript code of the same page here.

```javascript
1   /* Filename: w6P1.js
2      Target html: w6P1.html
3      Purpose : display names using for and while loops, count the number of letters in a name
4      Author: Mario Stavreski
5      Date written: 27/04/2020
6      Revisions:  v1.0
7   */
8
9   var arrNames = ["Mario", "Brian", "Dominic", "Mia", "Han", "Peter", "Paul", "Andreas"]; //array of names
10
11  function listValuesForLoop() {//lists the names using a for loop
12
13    var vNames = "";
14    vNames = "This is a list of names using a for loop: ";
15    var vIndex = 0;
16
17      for (vIndex = 0; vIndex < arrNames.length; vIndex++) {
18      vNames = vNames + arrNames[vIndex] + "</br>";
19    }
20
21    document.getElementById('msg1').innerHTML = vNames;
22
23  }
24
25  function listValuesWhileLoop() { // lists the names using a while loop
26
27    var vNames = "";
28    vNames = "This is a list of names using a for loop: ";
29    var vIndex = arrNames.length - 1;
30
31    while (vIndex >= 0) {
32      vNames = vNames + arrNames[vIndex]  + "</br>";
33      vIndex --;
34    }
35
36    document.getElementById('msg2').innerHTML = vNames;
37
38  }
39
40  function determineNameLength() { // determines the number of characters in a name
41    var vName = "";
42    vName = "Number of characters in my name: ";
43    document.getElementById('msg3').innerHTML = vName + arrNames[0].length;
44  }
```

```javascript
46    function init() {
47
48      var btn = document.getElementById('forbutton');
49      btn.onclick = listValuesForLoop;
50
51      var btn = document.getElementById('whilebutton');
52      btn.onclick = listValuesWhileLoop;
53
54      var btn = document.getElementById('namelength');
55      btn.onclick = determineNameLength;
56    }
57
58    window.onload = init;
59
```

Pass Task 13 web page testing

Paste the screen captures of your testing web page here.

Pass Tasks Loops

| List names using a for loop | List names using a while loop | Name length |

This is a list of names using a for loop: Mario
Brian
Dominic
Mia
Han
Peter
Paul
Andreas

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Pass Tasks Loops

List names using a for loop   List names using a while loop   Name length

This is a list of names using a while loop: Andreas
Paul
Peter
Han
Mia
Dominic
Brian
Mario

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Pass Tasks Loops

List names using a for loop   List names using a while loop   Name length

Number of characters in my name: 5

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Pass Task 14 HTML code

Paste the HTML code of the web page here.

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="utf-8" />
    <meta name="description" content="Statistics using loops and arrays" />
    <meta name="keywords"    content="arrays, statistics, javacript, loops, html" />
    <meta name="author"      content="Mario Stavreski" />
    <title>Statistics</title>
    <script src="W6P2.js"></script>
</head>
<body>
<header>
    <h1> Pass Task: Statistics </h1>
</header>
<article>

    <button type="button" id="stats"> Perform Stats </button>
    <p id="msg"></p>

</article>
<footer><p>Produced by Mario Stavreski</p></footer>
</body>
</html>
```

Pass Task 14 JavaScript code

Paste the JavaScript code of the same page here.

```javascript
/* Filename: W6P2.js
   Target html: W6P2.html
   Purpose : Perform statistics on an array of values
   Author: Mario Stavreski
   Date written: 25/04/2020
   Revisions:  v1.0
*/

// this function performes statistics on an array of values
    var arrNumbers = [12,14,16,18,20,13,15,17,19,29,28,21]
    var vIndex = 0;
    var arrValues = "";

    arrValues = "The values in the array are: ";

    var vIndex = 0;

    for (vIndex = 0; vIndex < arrNumbers.length; vIndex++) {// counts the number of values
      arrValues = arrValues + arrNumbers[vIndex] + ", ";
   }

    var valuesSum = 0;
    for (vIndex = 0; vIndex < arrNumbers.length; vIndex++) { //sums all the values in the array
      valuesSum = valuesSum + arrNumbers[vIndex];
   }

    var average = 0;

    average = valuesSum / vIndex; // calculates the average value

    document.getElementById('msg').innerHTML = arrValues + "<br/>" + "The Number of values in the array is: " + vIndex + "<br/>" + "The Total of all values is: " + valuesSum + "<br/>" + "The average value is: " + average;

 }

 function init() {

    var btn = document.getElementById('stats');
    btn.onclick = start;

 }


 window.onload = init;
```

Pass Task: Statistics

Perform Stats

The values in the array are: 12, 14, 16, 18, 20, 13, 15, 17, 19, 29, 28, 21,
The Number of values in the array is: 12
The Total of all values is: 222
The average value is: 18.5

Produced by Mario Stavreski

Paste the screen captures of your testing web page here.