```html
1    <html>
2    <head>
3    <title>Calculations</title>
4    <script language="javascript">
5
6    //declare an array object to hold integers
7    var numberArray = new Array();
8
9    //creates an object to hold how many numbers the array can hold
10   var arrayCap = 1000;
11
12       //function that takes in a number to find and outputs various different data about
         the array
13       function calculate(inputNum)
14       {
15           resetArray(); //resets the array (fills it with different numbers)
16
17           //blank variable to hold the output, the string to say.
18           var myNumbers = "";
19
20           //variable that represents the highest number in the array
21           var highest = 0;
22
23           //variable that represents the lowest number in the array
24           var lowest = 1000;
25
26           //variable that holds the total value of the array
27           var total = 0;
28
29           //variable that holds the total numebr of EVEN numbers in the array
30           var even = 0;
31
32           //variable that holds the total number of ODD numbers in the array
33           var odd = 0;
34
35           //variable that says whether or not the chosen input is inside the array
36           var inputAppeared = false;
37
38           //variable that tells the position at which the chosen number was first found
39           var position = 0;
40
41           //total number of times that the chosen number is inside the array
42           var totalInputCount = 0;
43
44           //searching throughout the entire array
45           for(var i = 0; i < numberArray.length; i++){
46
47               //makes a variable to access the current index
48               currentNumber = numberArray[i];
49
50               //adds the current number to the total to find average later
51               total += currentNumber;
52
53               //if the current number is divisable by 2, then it is even. If it isnt then
                 it is odd
54               if(currentNumber % 2 == 0)
55                   even++; //adds to the total even count if it is
56               else
57                   odd++; //adds to the total odd count if it isnt
58
59               //if the current number is higher than the current highest number, then make
                 that the new highest
60               if(currentNumber > highest)
61                   highest = currentNumber;
62
63               //if the current number is lower than the current lowest number, then make
                 that the new lowest
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64                    if(currentNumber < lowest)
65                        lowest = currentNumber;
66
67                //if the current number is equal to the input num then add to the total
                   input appearances,
68                //if the position has not been changed yet then change it;
69                if(currentNumber == inputNum){
70                    totalInputCount++;
71
72                    //if the input has not appeared yet, then make the current index the
                       position at where it has been found
73                    if(!inputAppeared){
74                        inputAppeared = true; //say that the chosen number has been found
75                        position = i; //set the position to the current index
76                    }
77                }
78
79            }
80
81        //have if the number was not in the array then say it was not in the array
              instead of saying -1 as the position
82        var positionText = inputAppeared ? position.toString() : "Not in array";
83
84        //output the text
85        document.outputForm.txaoutputField.value =
86            "Chosen Number: " + inputNum + "\n" +
87            "First Position: " + positionText + "\n" +
88            "Total Chosen Number Appearances: " + totalInputCount + "\n" +
89            "Highest Number Found: " + highest + "\n" +
90            "Lowest Number Found: " + lowest + "\n" +
91            "Average Value: " + (total / 1000) + "\n" +
92            "Odd Numbers: " + odd + "\n" +
93            "Even Numbers: " + even + "\n";
94
95
96    }
97
98    function resetArray(){
99        //resets the array / fills the array with random numbers
100       for(var i = 0; i < arrayCap; i++){
101           numberArray[i] = Math.floor(Math.random() * 1000) + 1;
102       }
103   }
104 </script>
105 <style type="text/css">
106     label{color:blue;
107         font-size:25px;}
108 </style>
109 </head>
110     <body>
111         <center>
112             <h1>Calculations and Functions</h1>
113                 </br>
114                 </br>
115                 <form name = "inputForm" onload="resetArray()">
116
117                     <input type="button" name="btnCalculate" value="Calculate"
118                         onclick="calculate(inputForm.textBox.value)"/>
119
120                     <input type="button" name="btnReset" value="Reset"
121                         onclick="resetArray()"/>
122
123                     <input type="text" name="textBox">
124
125                 </form>
126                 </br>
127                 <form name = "outputForm">
```

```html
              <textarea readonly name = "txaoutputField" id="outputField"
                  rows="30" cols="70">
              </textarea>
          </form>
      </center>
  </body>
</html>
```