

## **Assignment 1.**

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Programming and Scripting

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```
// Question 1

<!DOCTYPE html>
<html>

<body>

  <script>
    var arr = {};
    var sum = 0,
        i;
    //will ask user to type in number 50 times//
    for (i = 0; i < 50; i++) {
      arr[i] = Number(prompt("Enter number " + (Number(i))));
    }

    for (i = 0; i < 50; i++) {
      //will calculate sum of numbers over 40//
      if (arr[i] >= 40) {
        sum += arr[i];
      } else if (arr[i] < 40); {
        continue;
      }
    }
    document.write('Sum of numbers over 40 is ' + sum);
  </script>
</body>

</html>
```

```
//Question 2

<!DOCTYPE html>
<html>

<body>

    <script>
        function printEvenNums() {
            var sum = 0;
            var arr = {};
            for (i = 0; i < 20; i++) {
                arr[i] = Number(prompt("Enter number " + (Number(i))));
            }

            var evenNums = "<br>Even Numbers: <br>";

            for (i = 0; i < 20; i++) {
                // Divide i by 2
                // If modulus is 0, then it's an Even number
                if (arr[i] % 2 == 0) {
                    evenNums += arr[i] + "<br>";
                    sum = sum + arr[i];
                }
            }
            //Print even numbers
            document.write(evenNums, "Sum of even numbers = " + sum);
        }
        printEvenNums();
    </script>

</body>

</html>
```

```
//Question 3

<!DOCTYPE html>
<html>

<body>

    <script>
        function oddCount() {

            var arr = {};
            var count = 0;
            //will ask for user input 100 times, which is fairly enough//
            for (i = 0; i < 100; i++) {
                arr[i] = Number(prompt("Enter number " + (Number(i))));
            }

            var oddNums = "<br>Odd Numbers: <br>";

            for (i = 0; i < 100; i++) {
                // Divide i by 2
                // If modulus is 1, then it's an Odd number
                if (arr[i] % 2 == 1) {
                    oddNums += arr[i] + "<br>";
                    count = count + arr[i];
                }
            }
            //print the values
            document.write(oddNums, "Odd number count = " +
                count);
        }
        oddCount();
    </script>

</body>

</html>
```

```
//Question 4

<!DOCTYPE html>
<html>

<body>

  <script>
    // User input//
    const number = parseInt(prompt('Generate how many Fibonacci
terms? '));
    let m1 = 0,
        m2 = 1,
        nextTerm;

    document.write('Fibonacci numbers:' + "<br>");

    for (let i = 1; i <= number; i++) {
      document.write(m1 + "<br>");
      nextTerm = m1 + m2;
      m1 = m2;
      m2 = nextTerm;
    }
  </script>
</body>

</html>
```

```
//Question 5

<!DOCTYPE html>
<html>

<body>

    <button onclick="printPrimeNums()">Generate Prime Numbers</button>
    <script>
        function printPrimeNums() {

            var PrimeNums;
            //prime numbers will start from 100 to (including)9999//
            for (var i = 100; i <= 9999; i++) {
                PrimeNums = 1;

                for (var m = 2; m <= i / 2; m++) {
                    if (i % m == 0) {
                        PrimeNums = 0;
                        break;
                    }
                }
                if (PrimeNums == 1) {
                    document.write(i + "<br>");
                }
            }
        }
    </script>

</body>

</html>
```