1)

var n = window.prompt();

var total = 0;

for (i=1; i<=n; i++){

    total = total + i

}

document.write(total)

2)

var n = window.prompt();

var total = 0;

for (i=1; i<=n; i++){

    if((i%3 == 0) || (i%5 == 0)){

        total = total + i;

    }

}

document.write(total)

3)

var number = 1;

function result(number){

    if (number % 2 === 0){

        document.write("EVEN");

    }else{

        document.write("ODD");

    }

}

result(number);

4)

<html>

    <head>

        <title>Probability</title>

    </head>

    <body>

        <script>

            var flip = parseInt(prompt('Enter number of flips: '));

            document.write(flipProbability(flip));

            function flipProbability(flips){

                var sumHeads =0;

                for(i=0; i<flips;i++){

                    var toss = Math.random() \* 1;

                    //document.writeln(toss,": toss<br>");

                    document.writeln(toss,' <--headRatio(',flip,') <br>');

                    if(Math.floor(toss) == 1)

                        sumHeads+=1;

                }

                return sumHeads/10;

            }

        </script>

    </body>

</html>

5)

<html>

    <head>

        <title>Leap Year</title>

    </head>

    <body>

        <script>

            var year = parseInt(prompt('Enter year'));

            var count = 0;

            document.write("Next 20 leap year's from ",year," are: ");

            while (count < 20) {

            if (year % 4 == 0) {

                if (year % 100 != 0 || year % 400 == 0) {

                ++count;

                document.write(year,",");

                }

            }

            ++year;

            }

        </script>

    </body>

</html>

6)

var array = ["Hello", "World","in","a","Frame"];

console.log("\*\*\*\*\*\*\*\*\*");

for(i=0; i<array.length; i++){

    console.log("\*" + array[i] + "\*")

};

console.log("\*\*\*\*\*\*\*\*\*");

7)

<html>

    <head>

        <title>Currency Change</title>

    </head>

    <body>

        <script>

            var dollar = parseInt(prompt('Enter dollar amount'));

            document.writeln(dollar,"$ in other currencies: <br>");

            var rupee = dollar\*74.20;

            var yen = dollar\*109.841;

            var euro = dollar\*0.85;

            var PoundSterling = dollar\*0.72;

            var dinar = dollar\*247.43;

            document.writeln(rupee," INR = ",dollar,"$ <br>");

            document.writeln(Math.round(yen)," Yen = ",dollar,"$.<br>");

            document.writeln(euro," Pound = ",dollar,"$.<br>");

            document.writeln(PoundSterling," PoundSterling = ",dollar,"$.<br>");

            document.writeln(Math.round(dinar)," dinar = ",dollar,"$.<br>");

        </script>

    </body>

</html>

8)

var array1 = ["a","b","c"];

var array2=[1,2,3];

var newArray = array1.concat(array2)

document.write(newArray)

9)

var array1 = ["a","b","c"];

var array2=[1,2,3];

function newArray() {

    var arr = [];

    for (var i=0;i<array1.length;++i) {

    arr.push(array1[i]);

    arr.push(array2[i]);

    }

    return arr;

}

result = newArray();

document.write(result)

10)

let number = parseInt(prompt());

let n1 = 1, n2 = 1, nextTerm;

for (let i = 1; i <= number; i++) {

    document.write(n1 + " ");

    nextTerm = n1 + n2;

    n1 = n2;

    n2 = nextTerm;

}

11)

var myArray = [1, 4, 5 ,6 , 4, 3, 7];

function reverse(){

    var reverse = myArray.reverse();

    document.write(reverse)

}

reverse();

12)

<html>

    <head>

        <title>longest seq</title>

    </head>

    <body>

        <script>

            var string = prompt("Enter continuous single string");

            var output ="", temp = "";

            document.write(string," type: ",typeof(string));

            for(i=0;i<string.length;i++){

                if(string.charAt(i) == "a" || string.charAt(i) == "b" ){

                    //document.write("before temp ",i," : ",temp," output : ",output,"<br>");

                    if(temp.length> output.length)

                        output = temp;

                    temp = "";

                    //document.write("after temp ",i," : ",temp," output : ",output,"<br><br>");

                }

                else{

                    temp = temp.concat(string.charAt(i));

                    //document.write(" temp ",i," : ",temp," output : ",output,"<br>");

                }

            }

            document.write('final output: "',output,'"');

        </script>

    </body>

</html>

13)

a)

var array = [1,2,3,4,5];

var sum = 0;

function newArray(){

    for (i=0; i<array.length; i++){

        sum = sum + parseInt(array[i])

    }

    document.write(sum);

}

newArray();

b)

var array = [1,2,3,4,5,6];

var sum = 0;

var count = 0;

while (count < array.length){

    sum = sum + parseInt(array[count])

    count = count + 1;

}

document.write(sum);

14)

function findLargest(randomValuesArray) {

    var largeNo = randomValuesArray[0];

    for (var i = 0; i < randomValuesArray.length; i++) {

      if (largeNo < randomValuesArray[i]) {

        largeNo = randomValuesArray[i];

      }

    }

    console.log("Largest No. is: " + largeNo);

  }

  function findSmallest(randomValuesArray) {

    var smallNo = randomValuesArray[0];

    for (var i = 0; i < randomValuesArray.length; i++) {

      if (smallNo > randomValuesArray[i]) {

        smallNo = randomValuesArray[i];

      }

    }

    console.log("Smallest No. is: " + smallNo);

  }

  function evenoddCount(randomValuesArray) {

      var evenCount = 0, oddCount = 0;

      for (var i = 0; i < randomValuesArray.length; i++) {

          if(randomValuesArray[i]%2==0){

              evenCount++;

          }else{

              oddCount++;

          }

      }

      if(evenCount>oddCount){

          alert("Even is larger & it's count is: " + evenCount);

      }

      else{

          alert("Odd is larger & it's count is: " + oddCount);

      }

    }

    function sumAndAverage(randomValuesArray) {

      var sum = 0;

      for (var i = 0; i < randomValuesArray.length; i++) {

        sum += randomValuesArray[i];

      }

      console.log("Sum of all random Num. is: " + sum);

      console.log("average is: " + sum/randomValuesArray.length);

    }

  const ARRAY\_LENGTH = 100;

  var randomValues = Array.apply(null, { length: ARRAY\_LENGTH }).map((x) => Math.floor(Math.random() \* 100));

  findLargest(randomValues);

  findSmallest(randomValues);

  evenoddCount(randomValues);

  sumAndAverage(randomValues);

15)

17)

function leftRotate(arr, d, n) {

    for (i = 0; i < d; i++) {

      leftRotatebyOne(arr, n);

    }

  }

  function leftRotatebyOne(arr, n) {

    var i, temp;

    temp = arr[0];

    for (i = 0; i < n - 1; i++) arr[i] = arr[i + 1];

    arr[n - 1] = temp;

  }

  //print an array

  function printArray(arr, n) {

    for (i = 0; i < n; i++) {

      document.write(arr[i] + " ");

    }

  }

  // \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

  var arr = [1, 2, 3, 4, 5, 6, 7];

  leftRotate(arr, 2, 7);

  printArray(arr, 7);