1. **Do the below programs in anonymous function & IIFE**
   1. **Print odd numbers in an array**

**Solution:**

var arr=function(a){

    for(i=0; i<=a; i++){

        if(i%2 !== 0)

        {

         res.push(i);

        }

    }

    console.log(res);

}

var res=[];

 arr(20);

**Output:**

[1, 3, 5, 7, 9, 11, 13, 15, 17, 19]

* 1. **Convert all the strings to title caps in a string array**

**Solution:**

function titleCase(str) {

    str = str.toLowerCase().split(' ');

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

      str[i] = str[i].charAt(0).toUpperCase() + str[i].slice(1);

    }

    return str.join(' ');

  }

  console.log(titleCase("GEEKS FOR GEEKS"));

**Output:**

Geeks For Geeks

* 1. **Sum of all numbers in an array**

**Solution:**

var fun=function(arr){

  for(var i=0;i<arr.length;i++){

    sum=sum+arr[i];

  }

  return sum;

}

var arr=[2,4,5,6,6,7,8,8,8];

var sum=0;

console.log(fun(arr));

**Output:**

54

**f. Return median of two sorted arrays of same size**

**Solution:**

var ar1 = [1, 12, 15, 26, 38];

var ar2 = [2, 13, 17, 30, 45];

var n1 = ar1.length;

var n2 = ar2.length;

if (n1 == n2)

    document.write("Array is Equal");

else

    document.write("Array is UnEqual");

**Output:**

Array is Equal

g. Remove duplicates from an array

// g. Remove duplicates from an array

function removeDuplicates(arr, n)

{

    if (n==0 || n==1)

        return n;

    var temp = new Array(n);

    var j = 0;

    for (var i=0; i<n-1; i++)

        if (arr[i] != arr[i+1])

            temp[j++] = arr[i];

            temp[j++] = arr[n-1];

            for (var i=0; i<j; i++)

              arr[i] = temp[i];

    return j;

}

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

    var n = arr.length;

    n = removeDuplicates(arr, n);

    for (var i=0; i<n; i++)

       document.write( arr[i]+" ");

**Output:**

1 2 3 4 5

**h. Rotate an array by k times**

**Solution:**

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;

}

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);

**Output:**

3 4 5 6 7 1 2

2. <https://medium.com/@reach2arunprakash/guvi-zen-class-javascript-warm-up-programming-problems-15973c74b87f>

**Solution:**

1. Write a function called “addFive”.  
   Given a number, “addFive” returns 5 added to that number.  
   Input:

addFive(5);  
addFive(0);  
addFive(-5);

**Solution:**

var addFive=function(a){

    return a+5;

}

console.log(addFive(5));

console.log(addFive(0));

console.log(addFive(-5));

Output:

10

5

0

1. Write a function called “getOpposite”. Given a number, return its opposite

**Solution:**

var getOpposite=function(a){

    return -a;

}

console.log(getOpposite(5));

console.log(getOpposite(10));

**Output:**

-5

-10

1. Fill in your code that takes an number minutes and converts it to seconds.

Examples  
toSeconds(5) ➞ 300

toSeconds(3) ➞ 180

toSeconds(2) ➞ 120

Solution:

var hours = 60;

function toSeconds(min) {

    return min\*hours

}

console.log(toSeconds(5));

Output:

300

1. Create a function that takes a string and returns it as an integer.

Examples  
toInteger(“6”) ➞ 6

toInteger(“1000”) ➞ 1000

toInteger(“12”) ➞ 12

Solution:

function toInteger(mystr) {

    return +mystr;

}

console.log(toInteger("5"));

console.log(toInteger("1000"));

console.log(toInteger("30"));

Output:

5

1000

30

1. Create a function that takes a number as an argument, increments the number by +1 and returns the result.
2. Examples  
   nextNumber(0) ➞ 1
3. nextNumber(9) ➞ 10
4. nextNumber(-3) ➞ -2

Solution:

function toInteger(mystr) {

    return mystr+1;

}

console.log(toInteger(2));

console.log(toInteger(10));

console.log(toInteger(-3));

Output:

3

11

-2

f. Create a function that takes an array and returns the first element.

Solution:

function toArray(mystr) {

    return mystr[0];

}

console.log(toArray([1,2,3]));

console.log(toArray([10,3,45]));

console.log(toArray([-7,2,6]));

Output:

1

10

-7

g. Write a function that converts hours into seconds.

Solution:

function tohours(hours) {

    return (hours\*60)\*60;

}

console.log(tohours(2));

Output:

7200

h. Find the Perimeter of a Rectangle  
Create a function that takes height and width and finds the perimeter of a rectangle.

Solution:

function tohours(l,w) {

    return 2\*(l+w);

}

console.log(tohours(2,4));

Output:

12

1. Less Than 100?  
   Given two numbers, return true if the sum of both numbers is less than 100. Otherwise return false.

Solution:

function toSum(a,b) {

    sum=a+b;

    if(sum<100)

    {

        return true;

    }else{

        return false;

    }

}

console.log(toSum(2,4));

Output:

**True**

1. There is a single operator in JavaScript, capable of providing the remainder of a division operation. Two numbers are passed as parameters. The first parameter divided by the second parameter will have a remainder, possibly zero. Return that value.

Solution:

function toreminder(a,b) {

     var reminder=a%b;

    return reminder;

}

console.log(toreminder(-9,45));

**Output:**

-9

1. **Do the below programs in arrow functions**
2. **Print odd numbers in an array**

**Solution:**

var arr=(a)=>{

    for(i=0;i<=a;i++){

        if(i%2 !== 0)

        {

            res.push(i);

        }

    }

    console.log(res);

}

var res=[];

arr(20);

Output:

(10) [1, 3, 5, 7, 9, 11, 13, 15, 17, 19]

1. **Convert all the strings to title caps in a string array**

**Solution:**

var titleCase=(str)=>{

    str = str.toLowerCase().split(' ');

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

      str[i] = str[i].charAt(0).toUpperCase() + str[i].slice(1);

    }

    return str.join(' ');

}

console.log(titleCase("GEEKS FOR GEEKS"));

**Output:**

Geeks For Geeks

1. **Sum of all numbers in an array**

**Solution:**

var fun=(arr)=>{

  for(var i=0;i<arr.length;i++){

    sum=sum+arr[i];

  }

  return sum;

}

var arr=[2,4,5,6,6,7,8,8,8];

var sum=0;

console.log(fun(arr));

**Output:**

54

1. **Return all the prime numbers in an array**

**Solution:**

var numArray = [2, 3, 4, 5, 6, 7, 8, 9, 10]

numArray = numArray.filter((number) => {

    for (var i = 2; i <= Math.sqrt(number); i++) {

        if (number % i === 0) return false;

    }

    return true;

});

console.log(numArray);

**Output:**

(4) [2, 3, 5, 7]