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

**Answer**

(function (arr)

{

let odd = [];

for (let i in arr) {

if (arr[i] % 2 !== 0) {

odd.push(arr[i]);

}

}

console.log(odd);})

([1, 2, 3, 4, 5, 6,7,8]);

**Output:**

[ 1, 3, 5, 7 ]

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

**Answer**

let caps = function (str) {

return str[0].toUpperCase() + str.slice(1);

};

console.log(caps(“javascript"));

##### Output:

Javascript

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

**Answer**

vararr = [11, 12, 13, 14,15];

var total = 0;

for (vari in arr) {

total += arr[i];

}

console.log(total);

**Output:**

65

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

**Answer**

let prime = function (arr) {

return arr.filter((n) => {

for (let i = 2; i< n; i++) {

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

}

return n> 1;

});

};

console.log(prime([2,3,7,9,13,19,21,35]));

##### Output:

[ 2, 3, 7, 13, 19 ]

**e. Return all the palindromes in an array**

**Answer**

var words = ['amma', 'racecar', 'apple', 'porcupine', 'appa','live', 'level'];

vararr = [];

varstr = words.slice(0);

varpalndrm = str.toString().split("").reverse().join("").split(",");

console.log(palndrm);

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

for (let z = 0; z <palndrm.length; z++) {

if (words[i] == palndrm[z]) {

arr.push(words[i])

}

}

} console.log(arr);

##### Output:

[ 'level', 'evil', 'appa', 'enipucrop', 'elppa', 'racecar', 'amma' ]

[ 'amma', 'racecar', 'appa', 'level' ]

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

**Answer**

function getMedian(ar1, ar2, n)

{

vari = 0;

var j = 0;

var count;

var m1 = -1, m2 = -1;

for (count = 0; count <= n; count++)

{

if (i == n)

{

m1 = m2;

m2 = ar2[0];

break;

}

else if (j == n)

{

m1 = m2;

m2 = ar1[0];

break;

}

if (ar1[i] <= ar2[j])

{

m1 = m2;

m2 = ar1[i];

i++;

}

else

{

m1 = m2;

m2 = ar2[j];

j++;

}

}

return (m1 + m2)/2;

}

var ar1 = [3, 5, 7, 12, 13, 14, 21];

var ar2 = [23, 23, 23, 23, 29, 40, 56];

var n1 = ar1.length;

var n2 = ar2.length;

if (n1 == n2)

console.log("Median is "+ getMedian(ar1, ar2, n1));

else

console.log("Doesn't work for arrays of unequal size");

##### Output:

Median is 22

**g. Remove duplicates from an array**

**Answer**

(function (rpt) {

let arr1 = [];

for (let i in rpt) {

if (arr1.indexOf(rpt[i]) === -1)

{

arr1.push(rpt[i]);

}

}

console.log(arr1);

})

([3, 5, 7, 12, 14, 14, 21, 23, 23, 23, 23]);

##### Output:

**[ 3, 5, 7, 12, 14, 21, 23 ]**

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

**Answer**

let rotated = function (arr, k) {

for (let i = 0; i< k; i++) {

arr.unshift(arr.pop());

}

return arr;

};

console.log(rotated([1, 3, 4], 2));

##### Output:

[ 3, 4, 1 ]

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

**Answer**

const odd = (arr) => {

let arr1 = [];

for (let i in arr) {

if (arr[i] % 2 !== 0) {

arr1.push(arr[i]);

}

}

return arr1;

};

console.log(odd([2,4,9,7,10,22,17]));

##### Output:

[ 9, 7, 17 ]

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

**Answer**

const capital1 = (str) => {

vararr = str.split(" ");

console.log(arr);

var res = [];

for (vari in arr) {

res.push((arr[i] = arr[i][0].toUpperCase() + arr[i].slice(1)));

}

return res.join(" ");

};

console.log(capital1("my name is pradeep."));

##### Output:

[ 'my', 'name', 'is', 'pradeep.' ]

My Name Is Pradeep.

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

**Answer**

var total = (arr) => {

var sum = 0;

for (vari in arr) {

sum += arr[i];

}

console.log(sum);

};

total([2, 3, 10]);

##### Output:

15

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

**Answer**

var prime = (arr) => {

return arr.filter((num) => {

for (vari = 2; i<num; i++) {

if (num % i === 0) {

return false;

}

}

return num> 1;

});

};

console.log(prime([1, 2, 3, 12, 25, 37, 99]));

##### Output:

[ 2, 3, 37 ]

* 1. **Return all the palindromes in an array**

**Answer**

varpalndrm = (arr) => {

var arr1 = [];

for (vari in arr) {

if (arr[i].split("").reverse().join("") === arr[i]) {

arr1.push(arr[i]);

}

}

return arr1;

};

console.log(palndrm(['amma', 'racecar', 'apple', 'porcupine', 'appa','live', 'level']));

##### Output:

[ 'amma', 'racecar', 'appa', 'level' ]

1. [**https://medium.com/@reach2arunprakash/guvi-zen-class-javascript-warm-up-programming-problems-15973c74b87f**](https://medium.com/@reach2arunprakash/guvi-zen-class-javascript-warm-up-programming-problems-15973c74b87f)

**a) Write a function called “addFive”.Given a number, “addFive” returns 5 added to that number.**

**Answer**

varnum = 5;

function addFive(num) {

return num + 5;

}

var result = addFive(num);

console.log(result);

**Output:**

10

**b)Write a function called “getOpposite”.Given a number, return its opposite (sign):**

**Answer**

function getOpposite(num)

{

if (typeofnum == "number")

{

return -num;

} else {

return -1;

}

}

var result = getOpposite(5)

console.log(result);

##### Output:

-5

**c) Fill in your code that takes an number minutes and converts it to seconds.**

**Examples:**

**toSeconds(5) ➞ 300**

**toSeconds(3) ➞ 180**

**toSeconds(2) ➞ 120**

**Answer**

function toSeconds(min) {

return min \* 60;

}

var secs = toSeconds(5)

console.log(secs)

##### Output:

**300**

**d)Create a function that takes a string and returns it as an integer.**

**Examples  
toInteger(“6”) ➞ 6**

**toInteger(“1000”) ➞ 1000**

**toInteger(“12”) ➞ 12**

**Answer**

varmystr = "1000";

function toInteger(mystr) {

return parseInt(mystr);

}

varmyint = toInteger(mystr);

console.log(myint);

##### Output:

1000

**e) Create a function that takes a number as an argument, increments the number by +1 and returns the result.**

**Examples**

**nextNumber(0) ➞ 1**

**nextNumber(9) ➞ 10**

**nextNumber(-3) ➞ -2**

**Answer**

varmyint = 0;

function nextNumber(myint) {

return myint + 1;

}

varmyNextint = nextNumber(myint);

console.log(myNextint);

##### Output:

1

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

**Examples**

**getFirstElement([1, 2, 3]) ➞ 1**

**getFirstElement([80, 5, 100]) ➞ 80**

**getFirstElement([-500, 0, 50]) ➞ -500**

**Answer**

vararr = [1, 2, 3];

function getFirstElement(arr) {

return arr[0];

}

var data = getFirstElement(arr)

console.log(data);

##### Output:

1

**g) Convert Hours into Seconds.Write a function that converts hours into seconds.**

**Examples  
hourToSeconds(2) ➞ 7200**

**hourToSeconds(10) ➞ 36000**

**hourToSeconds(24) ➞ 86400**

**Answer**

function hourToSeconds(arr) {

return arr \* 60 \* 60;

}

var data = hourToSeconds(2)

console.log(data);

##### Output:

7200

**h) Find the Perimeter of a Rectangle**

**Create a function that takes height and width and finds the perimeter of a rectangle.**

**Examples**

**findPerimeter(6, 7) ➞ 26**

**findPerimeter(20, 10) ➞ 60**

**findPerimeter(2, 9) ➞ 22**

**Answer**

function findPerimeter(num1,num2) {

return 2 \* (num1 + num2);

}

var perimeter = findPerimeter(6,7);

console.log(perimeter);

**Output:**

26

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

**Examples**

**lessThan100(22, 15) ➞ true**

**22 + 15 = 37**

**lessThan100(83, 34) ➞ false**

**83 + 34 = 117**

**Answer**

function lessThan100(num1,num2) {

let sum = num1 + num2;

if (sum < 100) {

return true;

} else return false;

}

var res = lessThan100(22,15);

console.log(res);

function lessThan100(num1,num2) {

let sum = num1 + num2;

if (sum < 100) {

return true;

} else return false;

}

var res = lessThan100(83, 34);

console.log(res);

**Output:**

true

**Output:**

false

**j)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.**

**Examples**

**remainder(1, 3) ➞ 1**

**remainder(3, 4) ➞ 3**

**remainder(-9, 45) ➞ -9**

**remainder(5, 5) ➞ 0**

**Answer**

function remainder(num1,num2) {

return (num1 % num2);

}

var res = remainder(-9,45);

console.log(res);

**Output:**

-9