**Question 1**

**Define an array of numbers (use any random numbers). Write a program in JavaScript to print only the even numbers of the array. Do not use any library functions, need to do via for loops only.**

<script>

let getEvenNumbers = () => {

const arr = [1, 2, 3, 4, 5,

for (num of arr){

if (num % 2 === 0) {

document.writeln (num + "<br />");

}}}getEvenNumbers();

</script>

# Question 2

**Find the maximum consecutive 1's in an array of 0's and 1's.**

**Example:**

**a) 00110001001110 - Output :3 [Max num of consecutive 1's is 3]**

**b) 1000010001 - Output :1 [Max num of consecutive 1's is 1]**

<script>

var findMaxConsecutiveOnes = function(nums) {

let largest = 0;

let current = 0;

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

nums[i] === 0 ? current = 0 : current++;

if (current > largest) largest = current;

};

return largest;

};

</script>

**Question 3**

**Suppose you have an array of 101 integers. This array is already sorted and all numbers in this array are consecutive. Each number only occurs once in the array except one number which occurs twice. Write a js code to find the repeated number.**

**e.g $arr = array(0,1,2,3,4,5,6,7,7,8,9,10...................);**

# Question 4

**Assume we have a form e.g**

**For the above form, write validation in javascript so that if the firstname is empty or if checkme is not checked, it will not allow the form to submit.**

<script>

function printRepeating(arr , size)

{var i, j;

document.write("Repeated Elements are :");

for (i = 0; i < size; i++)

{

for (j = i + 1; j < size; j++)

{

if (arr[i] == arr[j])

document.write(arr[i] + " ");

}}}

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

var arr\_size = arr.length;

printRepeating(arr, arr\_size);

</script>

<html>

<head>

<script>

function validateForm() {

var x = document.forms["myForm"]["fname"].value;

if (x == "" || x == null) {

alert("Name must be filled out");

return false;

}

}

</script>

</head>

<body>

<form name="myForm" onsubmit="return validateForm()">

FirstName: <input type="text" name="fname"> <br><br>

<input type="submit" value="Submit">

</form>

</body>

</html>

# Question 6

**Write css to center a box on the page. Let’s see we have a blank empty page and we want to create a box of size 100px x 100px and it should be the center of the page always. How will you do it?**

<html>

<head>

<style>

#example1 {

border: 2px solid red;

padding: 20%;

border-radius: 25px;

width: 100px;

height:100px;

}

</style>

</head>

<body>

<h2>border-radius: 25px:</h2>

<div id="example1">

<div>Javascript Developer</div>

</div>

</body>

</html>

# Question 8

**Assume there is a json object of this format**

**var obj = {**

**“id” : 4, “name” : “abc”,**

**“id” : 10, “name” : “ab2”,**

**“id” : 5, “name” : “abc3”,**

**“id” : 6, “name” : “abc5”**

**}**

**Write a code to sort the object by id**

obj.sort(function(a, b) {

return (a.id - b.id);

}).sort(function(a, b) {

return (a.name - b.name);

});