1. Write a JavaScript program that displays the largest integer among two integers.

*Sample numbers* : 47, 35

    <!-- Question 1 -->

    <p id="Q1"></p>

// Question 1

function findLargestInteger(num1, num2) {

    if (num1 > num2) {

        return num1;

    } else {

        return num2;

    }

}

let num1 = 47;

let num2 = 35;

let result = findLargestInteger(num1, num2);

document.getElementById("Q1").innerHTML = (`The largest integer among ${num1} & ${num2} is ${result}`)

1. Write a JavaScript conditional statement to sort three numbers. Display an alert box to show the results.  
   *Sample numbers* : 0, -1, 4

    <!-- Question 2 -->

    Enter the first number <input type="number" name="first number" id="first"> <br><br>

    Enter the second number <input type="number" name="second number" id="second"> <br><br>

    Enter the third number <input type="number" name="third number" id="third"> <br><br>

    <button onclick="sortFunction()">Answer</button>

// Question 2

function sortFunction() {

    var a = Number(document.getElementById("first").value);

    var b = Number(document.getElementById("second").value);

    var c = Number(document.getElementById("third").value);

    if (a > b && b > c) {

        alert(`${a},${b},${c},`)

    } else if (a > c && c > b) {

        alert(`${a},${c},${b},`)

    } else if (b > a && a > c) {

        alert(`${b},${a},${c},`)

    } else if (b > c && c > a) {

        alert(`${b},${C},${a},`)

    } else if (c > b && b > a) {

        alert(`${c},${b},${a},`)

    } else {

        alert(`${c},${a},${b},`)

    }

}

1. Write a program that determines if a year is a leap year.

// Question 3

function isLeapYear(year) {

    return (year % 4 === 0 & year % 100 !== 0) | (year % 400 === 0);

}

const year = prompt("Enter an year");

if (isLeapYear(year)) {

    console.log(`${year} is a leap year`);

} else {

    console.log(`${year} is not a leap year`);

}

1. Write a program to print the numbers from 12 to 24 using for loop.

    <!-- Question 4 -->

    <p id="Q4"></p>

// Querstion 4

let i = 1;

let Number = '';

for (i = 12; i <= 24; i = i + 1) {

    Number = Number + i + " "

}

console.log(Number);

1. Write a program to calculate the sum of all the numbers in the following array.

const numbersArray = [1,13,22,123,49]

// Question 5

const numbersArray = [1, 13, 22, 123, 49];

sum = 0;

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

    sum += numbersArray[i];

}

console.log(sum);

1. Write a JavaScript for loop that iterates from 0 to 15. For each iteration, it checks if the current number is odd or even, and displays a message on the screen.  
   Sample Output :  
   "0 is even"  
   "1 is odd"  
   "2 is even"  
   ……..

    <!-- Question 6 -->

    <p id="Q6"></p>

// Question 6

for (j = 0; j<=15; j++) {

    if(j%2==0) {

        alert(`${j} is even`);

    } else {

        alert(`${j} is odd`);

    }

}

1. Write a JavaScript program to construct the following pattern, using a nested for loop.

\*

\* \*

\* \* \*

\* \* \* \*

\* \* \* \* \*

// Question 7

for (let a=0; a < 5; a++) {

    let numb = "";

    for (let b=0; b <=a; b++) {

        numb = numb + "\*"

    }

    console.log(numb);

}

1. Write a JavaScript program to sum 3 and 5 multiples under 1000.

//  Question 8

numw = 0;

for (i = 0; i < 1000; i++) {

    if (i % 3 == 0 & i % 5 == 0) {

        numw = numw + i;

    }

}

console.log(numw);

1. Write a JavaScript program that uses two nested loops and shows the following strings, including the apostrophes:

Next line is: "1, 3, 5, 7, 9,"

Next line is: "1, 3, 5, 7,"

Next line is: "1, 3, 5,"

Next line is: "1, 3,"

Next line is: "1,"

// Question 9

for (let i = 6; i >= 1; i--) {

    let num = "";

    for (let j = 1; j <= i \* 2 - 1; j += 2) {

        num += j + ", ";

    }

    console.log(`Next line is : \" ${num} \"`);

}

1. Write a JavaScript program to display the reading status of the following books.

const library = [

{

author: 'Bill Gates',

title: 'The Road Ahead',

readingStatus: true

},

{

author: 'Steve Jobs',

title: 'Walter Isaacson',

readingStatus: true

},

{

author: 'Suzanne Collins',

title: 'Mockingjay: The Final Book of The Hunger Games',

readingStatus: false

}];

// Question 10

const library = [

    {

        author: 'Bill Gates',

        title: 'The Road Ahead',

        readingStatus: true

    },

    {

        author: 'Steve Jobs',

        title: 'Walter Isaacson',

        readingStatus: true

    },

    {

        author: 'Suzanne Collins',

        title:  'Mockingjay: The Final Book of The Hunger Games',

        readingStatus: false

    }];

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

    const book = library[i];

    console.log(`${book.readingStatus}`);

}