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

*Sample numbers* : 47, 35

 <script>

            let number=47;

            let number2 =35;

            if(number>number2){

                console.log(number);

            }else{

                console.log(number2)

            }

        </script>

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

<script>

        let x=0;

        let y=-1;

        let z=4;

        let smallest,middle,largest;

        if(x<=y && x<=z){

            smallest=x;

            if(y<=z){

                middle=y;

                largest=z;

            }else{

                middle=z;

                largest=y;

            }

        }else if(y<=x && y<=z){

            smallest=y;

            if(x<=z){

                middle=x;

                largest=z;

            }else{

middle=z;

                largest=x;

            }

        }else {

            smallest=z;

            if(x<=y){

                middle=x;

                largest=y;

            }else{

                middle=y;

                largest=x;

            }

        }

        alert("sorted numbers: "+smallest+" ,"+middle+", "+largest);

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

let year=2024;

        if((year%4==0)&&(year%100!=0)){

            console.log("year is  leap year");

        }

        else{

            console.log("year is not leap year");

            }

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

<script>

            for(let x=12;x<=24;x++){

                console.log(x)

            }

        </script>

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

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

<script>

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

            let sum=0;

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

                sum +=array[i]

            }

            console.log(sum)

        </script>

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"  
   ……..

<script>

        for(let x=0;x<15;x++){

            if(x%2==0){

       console.log( x +"Number is even");

        }else{

        console.log( x +"Number is odd");

           }

     }

        </script>

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

\*

\* \*

\* \* \*

\* \* \* \*

\* \* \* \* \*

 <script>

            for(let i=0;i<5; i++){

                let number=" ";

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

                    number=number+"\*";

                }

               console.log(number)

            }

        </script>

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

 <script>

        let sum=0;

        for(let x=0;x<1000;x++){

            if(x%3==0 && x%5==0){

                sum +=x;

            }

        }

        console.log(sum)

        </script>

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,"

<script>

            for(let i=5; i>=1 ;i--){

                let line='';

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

                    line += j\*2-1;

                    if(j<i){

                        line +=' ,';

                    }

                }

            console.log("next line is: "+ line );

            }

        </script>

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

}];

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(let x=0; x<library.length;x++){

    console.log(library[x].readingStatus)

   }

   </script>

