While loop example programs:

<!-- write a program to print the sum of the digits of the given number? -->

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

</head>

<body>

    <script>

        let n = parseInt(prompt("Enter the number"));

        let sum = 0;

        while(n!=0){

            sum = sum + n%10;

            n = parseInt(n/10);

        }

        document.write(`sum of digits ${sum}`);

    </script>

</body>

</html>

<!-- write a program to reverse a given number -->

 <html lang="en">

 <head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

 </head>

 <body>

    <script>

        let n = parseInt(prompt("Enter the no to reverse"));

        let revNum = 0;

        while(n!=0){

            revNum = revNum \*10 + n%10;

            n = parseInt(n/10);

        }

        document.write(`the reverse number is ${revNum}`);

    </script>

 </body>

 </html>

Do-while:

* Condition is at exit level
* There is a guarantee that the loop executes atleast once

Syntax:

<script>

   do{

            statements;

        }while(condition);

</script>

Assignments: WAP to find whether the given number is a prime number or not.

Wap to find whether the given number is an Armstrong number or not.

WAP to find whether the given number is a perfect number or not.

**For Loop:**

<script>

        for(let i=1; i<=10; i++)

            document.write(`<br> Hello ${i}`);

    </script>

Note: As we declared i with let, and let is a block scoped, we cannot access it after the block.

**Nested Loops:**

<script>

        let i =1;

        while(i<=2)

        {

            let j = 1;

            while(j<=3)

                {

                    document.write(`hello <br>`);

                    j++;

                }

            i++;

        }

    </script>

Assignment:

WAP to print the single digit sum of the digits of the given number

WAP to print the prime numbers in between 1 to 100

**DATE:** js contains the ready made class Date();, we can use this class and create an object to get date, it takes the date from the system.

Let d = new Date();

Methods of Date object:

* getYear()
* getMonth()
* getDate()
* getHours()
* getMinutes()
* getSeconds()

To define the date we can use syntax : let d = new Date(year, month, day) here the time is set as 00:00:00

Or we can create using this syntax: Date(year, month, day, hours, minutes, seconds)

ARRAYS:

* The length of array is dynamic
* The arrays are heterogeneous which means they can store different types of value in single array.
* The array is indexed which starts “0”.

Declaring the arrays in three ways:

* let x = [];
* let x = [values]; //defining the array with values,
* let x = new Array(no.of.elements); // we can not initial the values, but can declare the array with length