What is java Script?

-Javascript is a scripting language

-js is ahigh level programming language

-where the code is directly read by the interpriter

-js is a weakly/loosely typed language

Let ,var ,const

-js is a lightweight and dynamic language which is used to build the **UI**

-js is introduced in 1995 by Brenden eich

-Netscape navigator

-the first js programm wes developed within 7-8 days

-that first programm was named as “Mocha”

-the real name of the js is “livescript” later it is named as ‘js’

**Applications of js:**

Mobile,smartwatch, gamming,web apps , server side apps, data(mongo db)

**Variables:**

-the variables are nothing but the containers that are used to store the data

Types of variables:

1. Var(1995)
2. Let(2015-es6)
3. Const(2015-es6)



Static area class Static method stack area heap area



-Identifiers:

They are the names given for memory(variable).

What is the meta tag?

What is url & uri ?

**Reassigning:**

* Reassign variables is possible by var
* var n = 1;
* n = 5;
* n = n + n;
* console.log(n + n);

Output: 10

* Reassign variables is possible by let
* <script>
* let n = 1;
* n = 5;
* console.log(n + n);
* </script>

Output: 10

* Reassign not accepted by the const
* <script>
* const n = 1;
* n = 5;
* console.log(n + n);
* </script>

Output: Uncaught TypeError: Assignment to constant variable.

at index.html: 12:11

**Redeclaring:**

* Redeclaring with var is possible
* <script>
* var n = 1;
* var n = 5;
* console.log(n + n);
* </script>

Output: 10

* Redeclaring with let is no accepted.
* <script>
* let n = 1;
* let n = 5;
* console.log(n + n);
* </script>

Output: Uncaught Syntax Error: Identifier 'n' has already been declared (at index.html: 12:13)

* Redeclaring with const not accepted.
* <script>
* const n = 1;
* const n = 5;
* console.log(n + n);
* </script>

Output: Uncaught Syntax Error: Identifier 'n' has already been declared (at index.html: 12:13)

**Block Scope:**

* Var block scope is not accepted.
* <script>
* var n = 1;
* {
* var n = 5;
* console.log(n);
* }
* console.log(n);
* </script>

Output: 5

5

* Let block scope is allowed.
* <script>
* let n = 1;
* {
* let n = 5;
* console.log(n);
* }
* console.log(n);
* </script>

Output: 5

1

* Const allows the block scope.
* <script>
* const n = 1;
* {
* const n = 5;
* console.log(n);
* }
* console.log(n);
* </script>

Output: 5

1

<script>

        var n = 1;

        var n = 6;

        {

            var n = 5;

            console.log(n);

        }

        console.log(n);

    </script>

Output: 5

5



<script>

        let n = 1;

        {

            let n = 5;

            console.log(n);

        }

        let n = 6;

        console.log(n);

    </script>

Output: Error



<script>

        const n = 1;

        {

            const n = 5;

            console.log(n);

        }

        const n = 6;

        console.log(n);

    </script>

Output: Error

#Java

Data types:

1. Js is dynamic type language

There are two types of data types

1. Primitive
2. Non-Primitive-Arrays,Objects

To check the data type we use the method- typeOf()

1. **Primitive data types**:

They are predefined and we can store single values

1. **Numbers**:integers,floats

Ex: 1,-2,3,-1,2.3,-4.3

1. **String**:Stream of characters enclosed in quotes(‘’-single ,””-double,backtick)

Ex: single and double quotes work as same and

**String concatination:**

1. **Boolean**:true (or) false
2. **Null**:empty value or no value
3. **Undefined**:declared variable with no value

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

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

    <title>Document</title>

</head>

<body>

    <p>

        hi how are u

    </p>

    <script>

        let a=5

        let b=-5

        console.log(typeof(a))

        console.log(typeof(b))

        document.write(typeof(a),'<br>')

        document.write(typeof(b),'<br>' )

        document.write("hi +a",'<br>')

        document.write(`hi +${a+b}`)

    </script>

</body>

</html>

String concatination:

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

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

    <title>Document</title>

</head>

<body>

    <p>

        hi how are u

    </p>

    <script>

        let a='Hari'

        let b='Krishna'

        let age=30

        let greeting=`I am ${a+" "+b}, my age is ${age}`

        document.write(greeting)

        //console.log(typeof(a))

        //console.log(typeof(b))

        //document.write(typeof(a),'<br>')

        //document.write(typeof(b),'<br>' )

       //document.write("hi +a",'<br>')

        //document.write(`hi +${a+b}`)

    </script>

</body>

</html>

Null & undefined example:

let x=null

        document.write(x,'<br>')

        document.write(typeof(x))

        let y

        console.log(y)

#hacker rank , leet code,codechef