



Experiment 4

Aim: To implement Javascript basics

Theory:

JavaScript is a lightweight, cross-platform, and interpreted compiled programming language which is also known as the scripting language for web pages. It is well-known for the development of web pages, many non-browser environments also use it. JavaScript can be used for Client-side developments as well as Server-side developments. Javascript is both an imperative and declarative type of language. JavaScript contains a standard library of objects, like Array, Date, and Math, and a core set of language elements like operators, control structures, and statements.

Code:

Html Code:

```
<!DOCTYPE html>

<html lang="en">

  <head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

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

    <title>Document</title>

  </head>

  <body>

    <h2>JavaScript variables</h2>

    <p id="demo"></p>

    <h2>Javascript Function</h2>

    <p id="demo1"></p>

    <h2>Javascript Condition(if..else)</h2>

    <p id="demo2"></p>

    <h2>Javascript loop(for loop)</h2>

    <p id="demo3"></p>

    <h2>JavaScript events</h2>

    <button onclick="document.getElementById('id1').style.color = 'red'">

      Click Me!
```



```
</button>

<p id="demo4"></p>

<h2>Javascript DOM CSS</h2>

<h1 id="id1">My Heading 1</h1>

<p id="p1">Hello World!</p>

<p>The paragraph above was changed by a script.</p>

<p>Please input a number between 1 and 10:</p>

<input id="num">

<button type="button" onclick="myFunction()">Submit</button>

<p id="demo5"></p>

<script src="first.js"></script>

</body>

</html>
```

Javascript Code:

```
var x = 5;

var y = 6;

var z = x + y;

document.getElementById("demo").innerHTML = "The value of z is: " + z;

function myFunction(p1, p2) {
    return p1 * p2;
}

document.getElementById("demo1").innerHTML =

    "the value of function multiplication is:" + myFunction(4, 3);

var a = 4;

var b = "";

if (a % 2 == 0) {
    b = "even no";
} else {
    b = "odd no";
}
```



```
document.getElementById("demo2").innerHTML = "the number is: " + b;

const cars = ["python", "java", "C", "C++", "HTML", "React"];

let text = "";

for (let i = 0; i < cars.length; i++) {
    text += cars[i] + "<br>";
}

document.getElementById("demo3").innerHTML = text;

document.getElementById("p1").innerHTML = "Mokshad Sankhe";

function myFunction() {
    // Get the value of the input field with id="numb"
    let num = document.getElementById("num").value;
    // If num is Not a Number or less than one or greater than 10
    let text;
    if (isNaN(num) || num < 1 || num > 10) {
        text = "Input not valid";
    } else {
        text = "Input OK";
    }
    document.getElementById("demo5").innerHTML = text;
}
```



Output:

JavaScript variables

The value of z is: 11

Javascript Function

the value of function multiplication is:undefined

Javascript Condition(if..else)

the number is: even no

Javascript loop(for loop)

python
java
C
C++
HTML
React

JavaScript events

Click Me!

Javascript DOM CSS

My Heading 1

Mokshad Sankhe

The paragraph above was changed by a script.

Please input a number between 1 and 10:

Input OK

Conclusion: Javascript is a lightweight, interpreted, object-oriented language with first-class functions, and is best known as the scripting language for Web pages.