1.INTRODUCTION TO JAVASCRIPT

TASK-1

```html
<!DOCTYPE html>
    <html lang = "en">
        <head>
          <meta charset="UTF-8">
    <meta name="viewport" content="width-device-width, initial-scale=1.0">
            <title>MERN PRATICE</title>
            </head>
            <body>
                <script>
          alert("Hello,World!");
                </script>
        </body>
    </html
```

OUTPUT:

TASK-2

```html
T<!DOCTYPE html>
    <html lang = "en">
```

```html
<head>

    <meta charset="UTF-8">

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

    <title>MERN PRATICE</title>

</head>

<body>

    <script>

        var name="john";

        const number = 56;

        let value=true;

        console.log(name);

        console.log(number);

        console.log(value);

    </script>

</body>

</html>
```
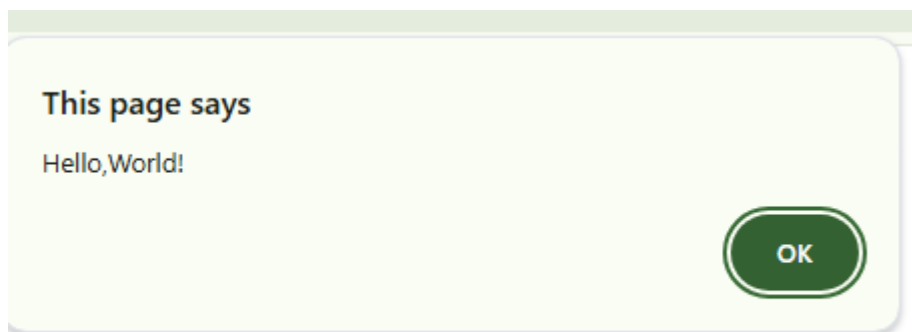
OUTPUT:

TASK-3

```html
<!DOCTYPE html>

    <html lang = "en">

        <head>
```

```html
        <meta charset="UTF-8">

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

        <title>MERN PRATICE</title>

    </head>

    <body>

        <script>

            var a=200;

            var b = 20;

            console.log(a+b);

            console.log(a-b);

            console.log(a*b);

            console.log(a/b);

        </script>

    </body>

</html>
```
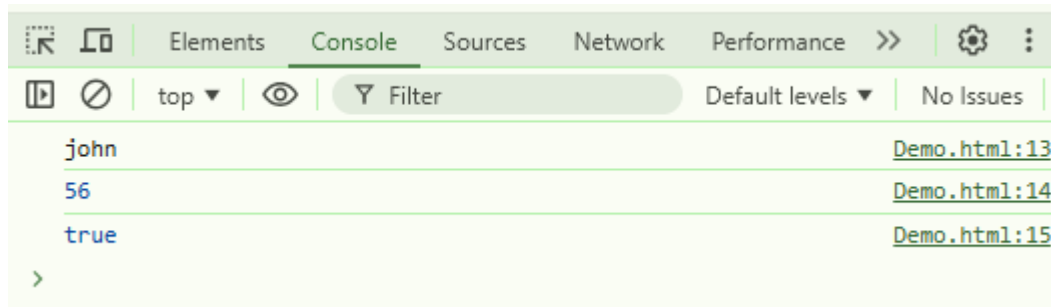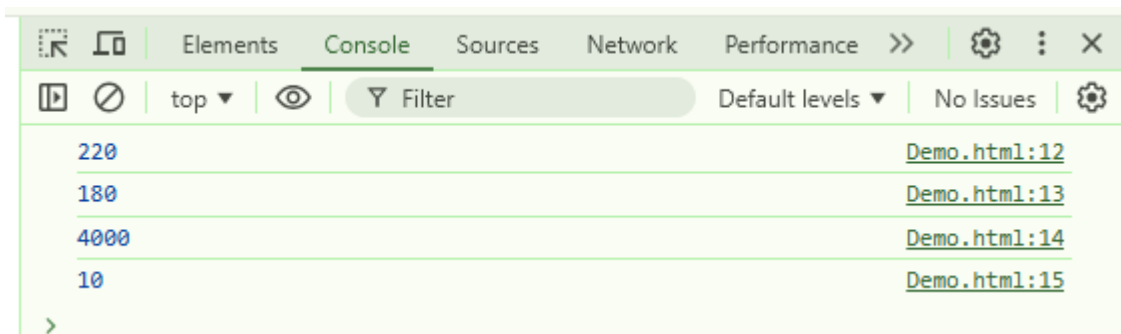
OUTPUT:

TASK-4

```html
<!DOCTYPE html>

    <html lang = "en">

        <head>

            <meta charset="UTF-8">

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

```html
        <title>MERN PRATICE</title>

    </head>

    <body>

        <script>

            var value1 = "Butterfly";

            var value2 = "Fly";

            document.write(value1+value2 + "<br>");

            var a = "Java";

            var b = "Script";

            document.write(a + b);


        </script>

    </body>

</html>
```

OUTPUT:

ButterflyFly
JavaScript

TASK-5

```html
<!DOCTYPE html>

<html lang = "en">

    <head>

        <meta charset="UTF-8">

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

        <title>MERN PRATICE</title>

    </head>
```

```html
    <body>

        <script>

            let value = true;

            document.write(typeof value +"<br>");

            document.write(typeof 55 + "<br>");

            document.write(typeof "Javascript");

        </script>

    </body>

</html>
```
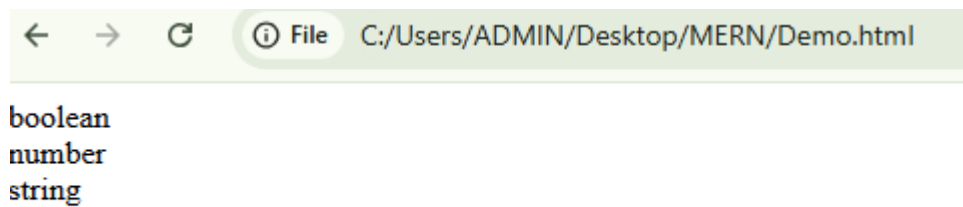
OUTPUT:

boolean
number
string

2.CODE STRUCTURE

TASK-6

// Single-line javascript comment

/*

Multi-line javascript comment

 ***/**

Single-line javascript comment used for short descriptions.

Multi-line javascript comment used for long descriptions.

TASK-7

<!DOCTYPE html>

    <html lang = "en">

```html
    <head>

        <meta charset="UTF-8">

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

        <title>MERN PRATICE</title>

    </head>

    <body>

        <script>

            let a = 6;

            let b = 9;

            console.log(a+b);

            var c = 5

            var d = 9

            console.log(c + d)

        </script>

    </body>

</html>
```

DIFFERENCES

There is no differences in script with semicolon and without semicolon.

In some cases we can see the differences while using functions,,,.

TASK-8

```html
<!DOCTYPE html>

    <html lang = "en">

        <head>

            <meta charset="UTF-8">

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

            <title>MERN PRATICE</title>
```

```html
</head>

<body>

    <script>

     for(var i = 1;i <=3;i++)

     {

          console.log("First Iteration:" +i);

          for(let j = 1;j<=2;j++)

     {

          console.log("Second iteration:" +j);

          for(var k=1;k<=1;k++)

     {

          console.log("Third Iteraton:" +k);

     }

     }

     }

    </script>

    </body>

</html>
```

OUTPUT:

First Iteration:1	Demo.html:12
Second iteration:1	Demo.html:15
Third Iteraton:1	Demo.html:18
Second iteration:2	Demo.html:15
Third Iteraton:1	Demo.html:18
First Iteration:2	Demo.html:12
Second iteration:1	Demo.html:15
Third Iteraton:1	Demo.html:18
Second iteration:2	Demo.html:15
Third Iteraton:1	Demo.html:18
First Iteration:3	Demo.html:12
Second iteration:1	Demo.html:15
Third Iteraton:1	Demo.html:18
Second iteration:2	Demo.html:15
Third Iteraton:1	Demo.html:18

TASK-9

```html
<!DOCTYPE html>
    <html lang = "en">
        <head>
            <meta charset="UTF-8">
            <meta name="viewport" content="width=device-width, initial-scale=1.0">
            <title>MERN PRATICE</title>
        </head>
        <body>
            <script>
              var name = "Sam",age = 14,Dept = "CSE";
              document.write(name +"<br>",age +"<br>",Dept +"<br>");
            </script>
```
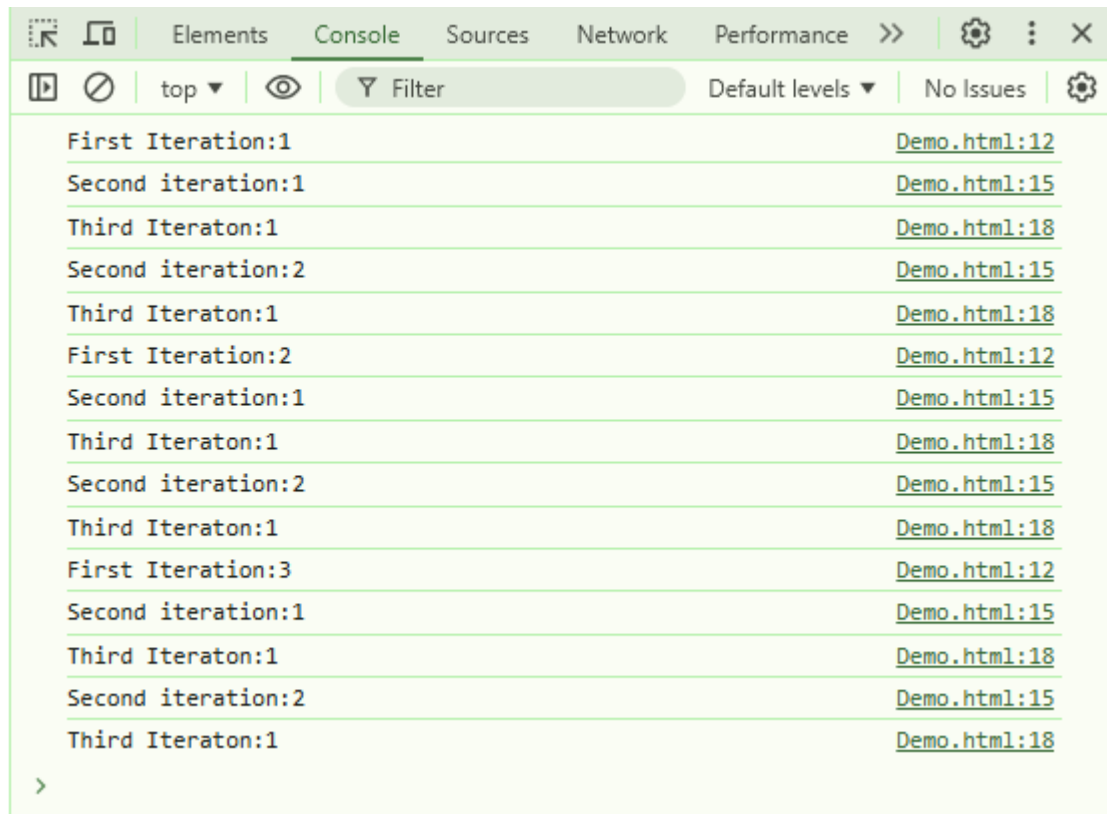
```
        </body>

    </html>
```

Sam
14
CSE

TASK-10

1.SCRIPT TAG USED INSIDE BODY:

```html
<!DOCTYPE html>

    <html lang = "en">

        <head>

            <meta charset="UTF-8">

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

            <title>MERN PRATICE</title>

        </head>

        <body>

            <script>

              console.log("Welcome");

            </script>

        </body>

    </html>
```
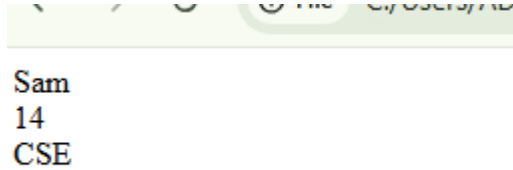
2.SCRIPT TAG USED INSIDE HEAD TAG

```html
<!DOCTYPE html>

    <html lang = "en">

        <head>

            <meta charset="UTF-8">

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

```html
        <title>MERN PRATICE</title>

        <script>

            console.log("Welcome");

        </script>

    </head>

      <body>

    </body>

  </html>
```

Script tag palced inside top and bottom,we cannot see any difference in behaviour.

there is no changes.

VARIABLES

TASK-16

```html
<!DOCTYPE html>

    <html lang = "en">

        <head>

            <meta charset="UTF-8">

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

            <title>MERN PRATICE</title>

        </head>

        <body>

            <script>

                var name="Ram";

                const number = 12;

                let value=true;

                console.log(name);

                console.log(number);

                console.log(value);
```

```
        </script>

      </body>

  </html>
```

USES:

Use **var** when we need to reassign a variable.

const cannot be reassigned.once the value is assigned using constant,it is not changed.

use **let** when we need to reassign a variable.

TASK-17

```
<!DOCTYPE html>

    <html lang = "en">

        <head>

            <meta charset="UTF-8">

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

            <title>MERN PRATICE</title>

        </head>

        <body>

            <script>

                const value = 32;

                value = 43;

                document.write(value);

            </script>

        </body>

    </html>
```

OUTPUT:

TASK-18

<!DOCTYPE html>

    <html lang = "en">

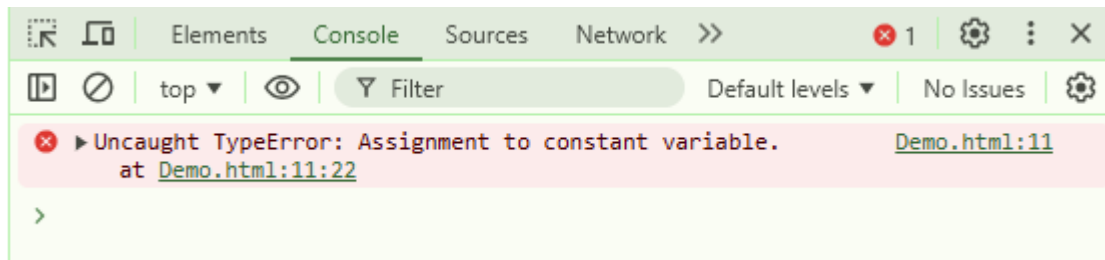   <head>

            <meta charset="UTF-8">

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

            <title>MERN PRATICE</title>

        </head>

        <body>

            <script>

                let value;

                document.write(value);

            </script>

        </body>

    </html>

OUTPUT:

File C:/Users/ADMIN/Desktop/MERN/Demo.html

undefined

TASK-19

<!DOCTYPE html>

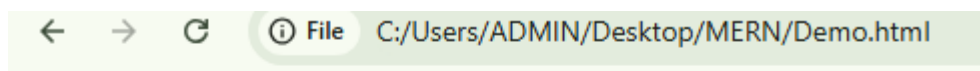   <html lang = "en">

```
        <head>

            <meta charset="UTF-8">

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

            <title>MERN PRATICE</title>

        </head>

        <body>

            <script>

                let value = true;

                document.write(typeof value +"<br>");

                document.write(typeof 55 + "<br>");

                document.write(typeof "Javascript");

            </script>

        </body>

    </html>
```

OUTPUT:

← → C ① File C:/Users/ADMIN/Desktop/MERN/Demo.html

boolean
number
string

TASK-20

```
<!DOCTYPE html>

    <html lang = "en">

        <head>

            <meta charset="UTF-8">

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

```html
            <title>MERN PRATICE</title>

        </head>

        <body>

            <script>

                var num = "mern practice";

                var newname = num;

                console.log(num);

                console.log(newname);

            </script>

        </body>

    </html>
```
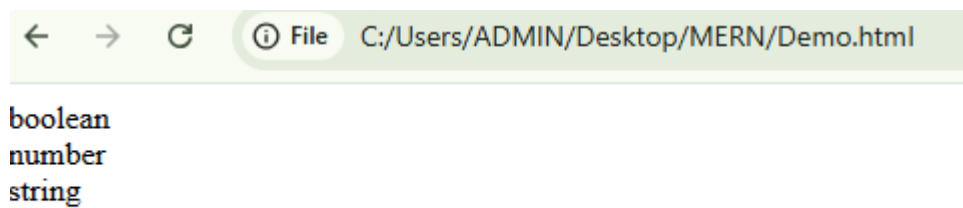
OUTPUT: