

4.A. Understand the basic elements of javascript and implement script code in HTML.

AIM:

To understand the basic elements of javascript and implement script code in html.

I. CODE:

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h2>Javascript</h2>
```

```
<p>This code demonstrates how to display output in javascript</p>
```

```
<p id="code1">Output is displayed here</p>
```

```
<script>
```

```
//access html elements by id name
```

```
document.getElementById("code1").innerHTML="OUTPUT 1 DISPLAYED";
```

```
//alert box can be used
```

```
window.alert("OUTPUT 2 DISPLAYED");
```

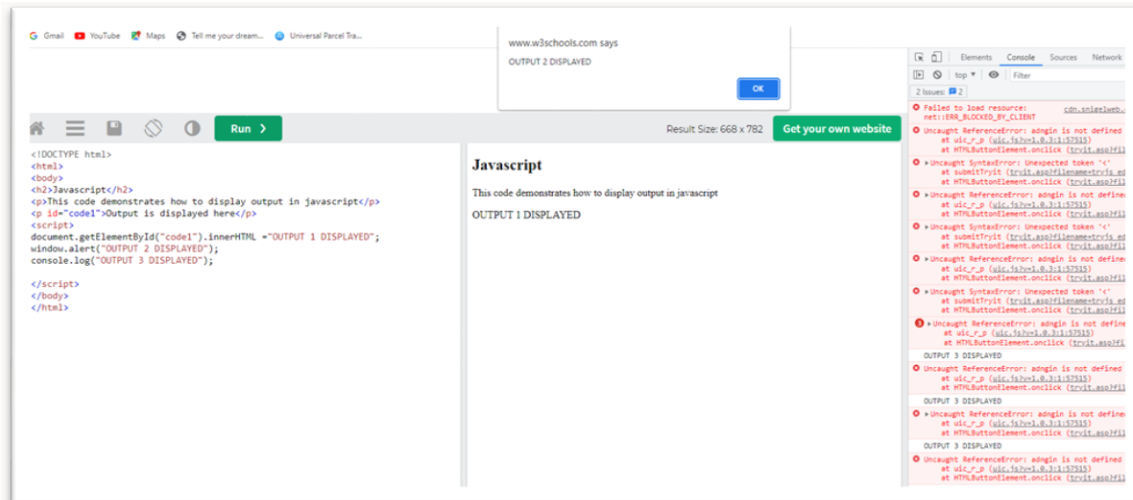
```
//message in console for debugging
```

```
console.log("OUTPUT 3 DISPLAYED");
```

```
</script></body>
```

```
</html>
```

OUTPUT:



## II. CODE:

<!DOCTYPE html>

<html>

<body>

<h2>Javascript</h2>

<p>This code demonstrates how to declare variables in javascript</p>

<p id="code1">Output1 is displayed here</p>

<p id="code2">Output 2 is displayed here</p>

<p id="code3">Output3 is displayed here</p>

<p id="code4">Output4 is displayed here</p>

<p id="code5">Output5 is displayed here</p>

<script>

// using var keyword;

var a=67;

var b=56;

document.getElementById("code1").innerHTML ="a + b =" + (a+b);

//using let keyword;

```
let c="apple";
```

```
let d="mango";
```

```
document.getElementById("code2").innerHTML ="c + d =" + (c+d);
```

//constant value using const keyword;

```
const x=34;
```

```
document.getElementById("code3").innerHTML ="constant value of x =" + x;
```

//declaring multiple variables In a single line;

```
let u=34,v=35,w=36;
```

```
document.getElementById("code4").innerHTML ="( u-v ) + w =" + (u-v)+w;
```

//declaring an undefined variable;

```
let new$variable;
```

```
document.getElementById("code5").innerHTML =new$variable;
```

```
</script>
```

```
</body>
```

```
</html>
```

OUTPUT:

```
<!DOCTYPE html>
<html>
<body>
<h2>Javascript</h2>
<p>This code demonstrates how to display output in javascript</p>
<p id="code1">Output is displayed here</p>
<p id="code2">Output is displayed here</p>
<p id="code3">Output is displayed here</p>
<p id="code4">Output is displayed here</p>
<p id="code5">Output is displayed here</p>
<script>
// to demonstrate declaration of variables;
var a=67;
var b=56;
document.getElementById("code1").innerHTML ="a + b =" + (a+b);
let c="apple";
let d="mango";
document.getElementById("code2").innerHTML ="c + d =" + (c+d);
const x=34;
document.getElementById("code3").innerHTML ="constant value of x =" + x;
let u=34,v=35,w=36;
document.getElementById("code4").innerHTML ="( u-v ) + w =" + (u-v)+w;
let new$variable;
document.getElementById("code5").innerHTML =new$variable;
</script>
</body>
</html>
```

## Javascript

This code demonstrates how to display output in javascript

a + b =123

c + d =applemango

constant value of x =34

( u-v ) + w =-136

undefined



### III. CODE:

```
<!DOCTYPE html>

<html>

<body>

<h2>Defining functions in javascript</h2>

<p>Function to convert fahrenheit to Celsius</p>

<p id="funccall">function call is implemented here</p>

<script>

//function definition;

function toCelsius(f) {

    return (5/9) * (f-32);    }

//function call;

document.getElementById("funccall").innerHTML = toCelsius(98.4);

</script>

</body>

</html>
```

### OUTPUT:



```
<!DOCTYPE html>
<html>
<body>
<h2>Defining functions in javascript</h2>
<p>Function to convert fahrenheit to Celsius</p>
<p id="funccall">function call is implemented here</p>
<script>
function toCelsius(f) {
    return (5/9) * (f-32);    }
document.getElementById("funccall").innerHTML = toCelsius(98.4);
</script>
</body>
</html>
```

Defining functions in javascript

Function to convert fahrenheit to Celsius

36.88888888888889

#### IV. CODE:

```
<!DOCTYPE html>

<html>

<body>

<h2>CONDITIONAL STATEMENTS IN JAVASCRIPT</h2>

<p>Grades based on marks:</p>

<p id="grade" style="background-color:blue;color:white">Grade is displayed here</p>

<script>

//to get input from user

var mark = prompt("Enter your mark:");

//to check a condition

if (mark > 90 ) {

    grade = "O";

} //to check multiple conditions

else if (mark>80) {

    grade = "A+";

} else if (mark>70) {

    grade = "A";

} else if (mark>60) {

    grade = "B+";

} else if (mark>50) {

    grade = "B";

} else {

    grade = "REAPPEARANCE"}

// to display the output based on the mark
```

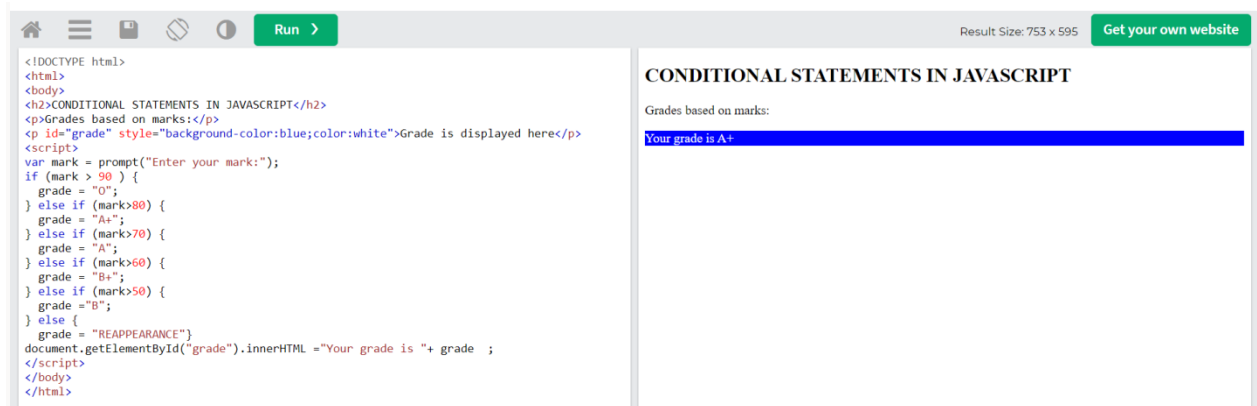
```
document.getElementById("grade").innerHTML="Your grade is "+ grade;
```

```
</script>
```

```
</body>
```

```
</html>
```

OUTPUT:



V. CODE:

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h2>For loop in javascript</h2>
```

```
<p>This code demonstrates looping in javascript</p>
```

```
<p id="code1" style="background-color:blue;color:white">Output is displayed here</p>
```

```
<script>
```

```
var string = prompt("Enter any word:");
```

```
let text="";
```

```
//iterate through each letter of the input string;
```

```
for (i = 0; i < string.length; i++) {
```

```
    text += string[i] + "<br>";
```

```
document.getElementById("code1").innerHTML = text;}
```

```
</script>
```

```
</body>
```

```
</html>
```

OUTPUT:



**RESULT:**

Basic concepts in javascript coding such as **printing the output, variable declaration, defining functions, conditional statements** and **looping** are studied, understood and the script code is implemented in HTML code.