



Lab Practice -2 [404184C] : ELECTIVE-III(C) - JavaScript

ACADEMIC YEAR: 2024-25

CLASS	: BE	DIV	: 7	Batch	: R-7	DATE	:
Roll No	42305	ABC ID	: 810-360-343-871	SEMESTER	: I		

Experiment No.: 2

HTML →

1. Using for loop

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

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

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

```
<title>Multiplication Table Generator using for loop</title>
```

```
<link rel="stylesheet" href="style_2.css">
```

```
</head>
```

```
<body>
```

```
<div class="container">
```

```
<h1>Multiplication Table Generator Using For Loop</h1>
```

```
<label for="numberInput">Enter a number: </label>
```

```
<input type="number" id="numberInput" placeholder="Enter number">
```

```
<button onclick="generateTableUsingForLoop()">Generate Table</button>
```

```
<div id="tableResult"></div>
```

```
<div class="info">
```

```
<h2>Name: Teena Bambal</h2>
```

```
<h3>Roll Number: 42305</h3>
```

```
</div>
```

```
</div>
```

```
<script src="script_2.js"></script>
```

```
</body>
```

```
</html>
```

2. Using while loop

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

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

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

```
<title>Multiplication Table Generator using while loop</title>
```

```
<link rel="stylesheet" href="style_2.css">
```

```
</head>
```

```
<body>
```

```
<div class="container">
```

```
<h1>Multiplication Table Generator Using While Loop</h1>
```

```
<label for="numberInput">Enter a number: </label>
```

```
<input type="number" id="numberInput" placeholder="Enter number">
```

```
<button onclick="generateTableUsingWhileLoop()">Generate Table</button>
```

```
<div id="tableResult"></div>
```

```
<div class="info">
```

```
<h2>Name: Teena Bambal</h2>
```

```
<h3>Roll Number: 42305</h3>
```

```
</div>
```

```
</div>
```

```
<script src="script_2.js"></script>
```

```
</body>
```

```
</html>
```

3. Using do-while loop

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <title>Multiplication Table Generator using do-while loop</title>

  <link rel="stylesheet" href="style_2.css">

</head>

<body>

  <div class="container">

    <h1>Multiplication Table Generator Using Do-While Loop</h1>

    <label for="numberInput">Enter a number: </label>

    <input type="number" id="numberInput" placeholder="Enter number">

    <button onclick="generateTableUsingDoWhileLoop()">Generate Table</button>

    <div id="tableResult"></div>

    <div class="info">

      <h2>Name: Teena Bambal</h2>

      <h3>Roll Number: 42305</h3>

    </div>

  </div>

  <script src="script_2.js"></script>

</body>

</html>
```

CSS ➔

```
body {  
  font-family: Arial, sans-serif;  
  background-color: #f0f8ff;  
  display: flex;  
  justify-content: center;  
  align-items: center;  
  height: 100vh;  
  margin: 0;  
}  
  
.container {  
  background-color: white;  
  padding: 20px;  
  border-radius: 8px;  
  box-shadow: 0px 4px 8px rgba(0, 0, 0, 0.1);  
  text-align: center;  
}  
  
input {  
  display: block;  
  margin: 10px auto;  
  padding: 10px;  
  border: 1px solid #ccc;  
  border-radius: 4px;  
}
```

```
button {  
    padding: 10px 20px;  
    margin-top: 10px;  
    background-color: #4caf50;  
    color: white;  
    border: none;  
    border-radius: 4px;  
    cursor: pointer;  
}  
  
button:hover {  
    background-color: #45a049;  
}  
  
h1 {  
    color: #333;  
}  
  
#tableResult {  
    margin-top: 20px;  
    color: #333;  
    background-color: #e0f7fa;  
    padding: 10px;  
    border-radius: 4px;  
}
```

```
table {  
    margin: 0 auto;  
    border-collapse: collapse;  
    width: 50%;  
}  
td {  
    border: 1px solid #333;  
    padding: 10px;  
    text-align: center;  
}  
h2,  
h3 {  
    margin: 5px;  
    color: #4caf50;  
}
```

JavaScript ➡

```
function generateTableUsingForLoop() {  
    let number = parseInt(document.getElementById("numberInput").value)  
    if (isNaN(number)) {  
        document.getElementById("tableResult").innerHTML =  
            "Please enter a valid number.";   
        return;  
    }  
    let tableHTML = `<table><tr><th>Multiplication Table of ${number}</th></tr>`;   
    for (let i = 1; i <= 10; i++) {  
        tableHTML += `<tr><td>${number} x ${i} = ${number * i}</td></tr>`;   
    }  
    tableHTML += "</table>";  
    document.getElementById("tableResult").innerHTML = tableHTML;  
}  
  
function generateTableUsingWhileLoop() {  
    let number = parseFloat(document.getElementById("numberInput").value);  
    if (isNaN(number)) {  
        document.getElementById("tableResult").innerHTML =  
            "Please enter a valid number.";   
        return;  
    }  
    let tableHTML = `<table><tr><th>Multiplication Table of ${number}</th></tr>`;   
    let i = 1;  
    while (i <= 10) {  
        tableHTML += `<tr><td>${number} x ${i} = ${number * i}</td></tr>`;   
        i++;  
    }  
}
```

```
tableHTML += "</table>";

document.getElementById("tableResult").innerHTML = tableHTML;
}

function generateTableUsingDoWhileLoop() {

    let number = parseFloat(document.getElementById("numberInput").value);

    if (isNaN(number)) {

        document.getElementById("tableResult").innerHTML =

            "Please enter a valid number.";

        return;

    }

    let tableHTML = `

||
||
||


```


Output➔

Multiplication Table Generator Using For Loop

Enter a number:

5

Generate Table

Multiplication Table of 5

5 x 1 = 5

5 x 2 = 10

5 x 3 = 15

5 x 4 = 20

5 x 5 = 25

5 x 6 = 30

5 x 7 = 35

5 x 8 = 40

5 x 9 = 45

5 x 10 = 50

Name: Teena Bambal

Roll Number: 42305

Multiplication Table Generator Using While Loop

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Generate Table

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Multiplication Table Generator Using Do-While Loop

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5 x 9 = 45

5 x 10 = 50

Name: Teena Bambal

Roll Number: 42305

Date:

Course Teacher Sign