Session	2024-25 (ODD)	Course Name	Web Technology Lab
Semester	3	Course Code	23CT1301
Roll No	56	Name of Student	Mangesh Gavhane

Practical Number	**7[A]**
Aim	Write a program in JavaScript to perform arithmetic operations.
Theory	JavaScript supports all standard arithmetic operators such as +, -, *, /, and % (modulus). These operators perform basic mathematical calculations on numeric values. This practical demonstrates the use of DOM (Document Object Model) to take input from the user, perform calculations, and display results dynamically without reloading the page.
Procedure and Execution	**Code:** **HTML FILE**

```html
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<title>Simple JavaScript Calculator</title>
<style>
body {
    font-family: Arial, sans-serif;
    background: linear-gradient(to right, #b3ffab, #12fff7);
display: flex;

    justify-content: center;
    align-items: center;
    height: 100vh;
    margin: 0;
}

.calculator {
    background: #fff;
    padding: 25px;
    border-radius: 10px;
    box-shadow: 0 0 10px rgba(0,0,0,0.2);
```

```css
        text-align: center;
        width: 300px;
    }
```

```css
input[type="number"] {
    width: 80%;
    padding: 10px;
    margin: 8px 0;
    border-radius: 5px;
border: 1px solid #ccc;
    font-size: 16px;
}


button {
    width: 45%;
    padding: 10px;
margin: 5px;
    background-color: #007bff;
    border: none;
    color: white;
    font-size: 16px;
    border-radius: 5px;
    cursor: pointer;
}


button:hover {
    background-color: #0056b3;
}

#result {
    margin-top: 15px;
    font-size: 18px;
    color: #222;
    font-weight: bold;
}
</style>
<script src="Practical7.js" defer></script>
</head>
<body>
```

```html
<div class="calculator">
    <h2>Calculator</h2>
    <input type="number" id="num1" placeholder="Enter first
number"><br>    <input type="number" id="num2"
placeholder="Enter second
number"><br>
```

```html
    <button onclick="calculate('+')">+</button>
    <button onclick="calculate('-')">-</button><br>
    <button onclick="calculate('*')">×</button>
    <button onclick="calculate('/')">÷</button><br>
    <button onclick="calculate('%')">%</button>
    <button onclick="clearResult()">C</button>


    <div id="result"></div>
</div>


</body>
</html>
```

JS FILE

```javascript
function calculate(operator) {
    let num1 = Number(document.getElementById("num1").value);
    let num2 = Number(document.getElementById("num2").value);
    let result;
    let operation = "";


    if (isNaN(num1) || isNaN(num2)) {
        document.getElementById("result").innerHTML = "⚠
Please enter valid numbers.";
        return;
    }


    switch (operator) {
        case '+':
```

```javascript
                result = num1 + num2;
operation = "Addition";

            break;
        case '-':
            result = num1 - num2;
            operation = "Subtraction";
            break;
        case '*':
            result = num1 * num2;
            operation = "Multiplication";
            break;
```

```javascript
        case '/':
            if (num2 === 0) {
                document.getElementById("result").innerHTML =
"⚠ Division by zero is not allowed.";
                return;
            }
            result = (num1 / num2).toFixed(2);
            operation = "Division";
            break;
        case '%':
            result = num1 % num2;
            operation = "Modulus";
            break;
default:
            document.getElementById("result").innerHTML =
"Invalid operation.";
            return;
    }

    document.getElementById("result").innerHTML =
`${operation}: ${result}`;

}
```
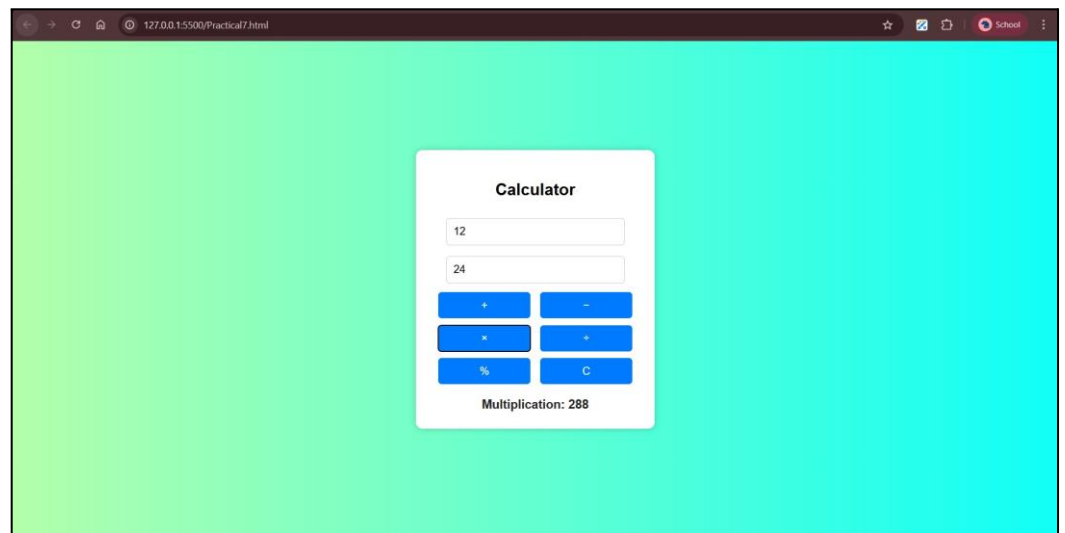
Output:

Link of student Github profile where lab assignment has been uploaded	https://github.com/mangesh102006 /web_technology
Conclusion	The program was successfully executed to perform arithmetic operations in JavaScript.
Plag Report (Similarity index < 12%)	**11%**
Date	**30th October 2025**