**HTML :-**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

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

    <title>Document</title>

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

</head>

<body>

    <div class="calculator">

        <h1>Basic Arithmetic Calculator</h1>

        <input type="number" id="num1" placeholder="Enter first number">

        <input type="number" id="num2" placeholder="Enter second number">

        <button onclick="performOperation ('add')">Addition</button>

        <button onclick="performOperation('subtract')">Subtraction</button>

        <button onclick="performOperation('multiply')">Multiplication</button>

        <button onclick="performOperation('divide')">Division</button>

        <div id="result"></div>

    </div>

    <script src="script.js"></script>

</body>

</html>

**CSS :-**

/\* Global styles \*/

body {

font-family: Arial, sans-serif;

background-color: #f4f4f4;

display: flex;

justify-content: center;

align-items: center;

height: 100vh;

margin: 0;

}

.calculator {

background-color: #fff;

padding: 20px;

border-radius: 8px;

box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);

width: 300px;

text-align: center;

}

h1 {

font-size: 24px;

}

input{

width: 80%;

padding: 8px;

margin: 10px 0;

border: 1px solid #ccc;

border-radius: 4px;

}

button {

width: 80%;

padding: 10px;

margin: 5px 0;

background-color: #234CAF50;

color: white;

border: none;

border-radius: 4px;

cursor: pointer;

}

button:hover{

background-color: #45a049;

}

#result{

margin-top: 20px;

font-size: 18px;

font-weight: bold;

}

**JavaScript :-**

function performOperation(operation) {

    const num1 = parseFloat(document.getElementById("num1").value);

    const num2 = parseFloat(document.getElementById("num2").value);

    if (isNaN(num1) || isNaN(num2)) {

        document.getElementById("result").innerText = "Please enter valid numbers.";

        return;

    }

    let result;

    switch (operation) {

        case 'add':

            result = num1 + num2;

            break;

        case 'subtract':

            result = num1 - num2;

            break;

        case 'multiply':

            result = num1 \* num2;

            break;

        case 'divide':

            if (num2 === 0) {

                document.getElementById("result").innerText = "Cannot divide by zero!";

                return;

            }

            result = num1 / num2;

            break;

        default:

            document.getElementById("result").innerText = "Invalid operation.";

            return;

    }

    document.getElementById("result").innerText = `Result: ${result}`;

}



