

## 1. HTML Structure

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Simple Calculator</title>

<link rel="stylesheet" href="style.css"> <!-- Optional, for styling -->

</head>

<body>

<div class="calculator">

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

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

<div class="buttons">

<button onclick="calculate('add')">+</button>

<button onclick="calculate('subtract')">-</button>

<button onclick="calculate('multiply')">*</button>

<button onclick="calculate('divide')">/</button>

</div>

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

</div>

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

</body>

</html>
```

## 2. CSS

(Optional) Create a style.css file to style the calculator:

```
body {
```

```
font-family: Arial, sans-serif;
```

```
text-align: center;
```

```
padding: 50px;
```

```
}
```

```
.calculator {
```

```
display: inline-block;
```

```
padding: 20px;
```

```
border: 2px solid #ccc;
```

```
border-radius: 10px;
```

```
}
```

```
input {
```

```
margin: 10px;
```

```
padding: 10px;
```

```
width: 150px;
```

```
}
```

```
button {
```

```
padding: 10px 20px;
```

```
margin: 5px;
```

```
cursor: pointer;
```

```
font-size: 18px;
```

```
}
```

```
button:hover {
```

```
background-color: #ddd;
```

```
}
```

### 3. JavaScript Code for Functionality

```
function calculate(operation) {
```

```
// Get the values of the input fields
```

```
let num1 = parseFloat(document.getElementById('num1').value);

let num2 = parseFloat(document.getElementById('num2').value);

let result = 0;

// Check if both inputs are valid numbers
if (isNaN(num1) || isNaN(num2)) {

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

    return;

}

// Perform calculation based on the operation
switch (operation) {

    case 'add':

        result = num1 + num2;

        break;

    case 'subtract':

        result = num1 - num2;

        break;

    case 'multiply':

        result = num1 * num2;

        break;

    case 'divide':

        // Error handling for division by zero
        if (num2 === 0) {

            document.getElementById('result').innerText = "Error: Division by zero.";

            return;

        }

        result = num1 / num2;

        break;

}
```

```
}
```

```
// Display the result
```

```
document.getElementById('result').innerText = "Result: " + result;
```

```
}
```