

HTML Code

Index.html

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <title>Calculator</title>

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

</head>

<body>

  <div class="calculator">

    <div class="calculator-screen" id="screen">0</div>

    <div class="calculator-buttons">

      <!-- Calculator buttons -->

      <button class="btn" id="clear">C</button>

      <button class="btn" id="delete">DEL</button>

      <button class="btn" id="divide">/</button>

      <button class="btn" id="multiply">*</button>

      <button class="btn" id="seven">7</button>

      <button class="btn" id="eight">8</button>

      <button class="btn" id="nine">9</button>

      <button class="btn" id="subtract">-</button>

      <button class="btn" id="four">4</button>

      <button class="btn" id="five">5</button>

      <button class="btn" id="six">6</button>

      <button class="btn" id="add">+</button>
```

```
<button class="btn" id="one">1</button>
```

```
<button class="btn" id="two">2</button>
```

```
<button class="btn" id="three">3</button>
```

```
<button class="btn equal" id="equals">=</button>
```

```
<button class="btn zero" id="zero">0</button>
```

```
<button class="btn" id="decimal">.</button>
```

```
</div>
```

```
</div>
```

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

```
</body>
```

```
</html>
```

CSS Code

style.css

```
* {  
  margin: 0;  
  padding: 0;  
  box-sizing: border-box;  
}  
  
body {  
  display: flex;  
  justify-content: center;  
  align-items: center;  
  height: 100vh;  
  background-color: #f4f4f4;  
  font-family: 'Arial', sans-serif;  
}  
  
.calculator {  
  background-color: #333;  
  padding: 20px;  
  border-radius: 10px;  
  width: 300px;  
}  
  
.calculator-screen {  
  background-color: #000;  
  color: #fff;  
  text-align: right;
```

```
padding: 20px;
font-size: 2em;
border-radius: 5px;
margin-bottom: 20px;
}
```

```
.calculator-buttons {
display: grid;
grid-template-columns: repeat(4, 1fr);
gap: 10px;
}
```

```
.btn {
padding: 20px;
font-size: 1.5em;
border: none;
border-radius: 5px;
background-color: #444;
color: #fff;
cursor: pointer;
transition: background-color 0.2s;
}
```

```
.btn:hover {
background-color: #555;
}
```

```
.equal {
grid-column: span 2;
background-color: #ff9500;
}
```

```
.zero {  
  grid-column: span 2;  
}
```

```
.equal:hover {  
  background-color: #ff6f00;  
}
```

JAVASCRIPT Code

```
// Get the calculator screen
let screen = document.getElementById('screen');

// Track the current input
let currentInput = '';
let currentOperator = '';
let firstOperand = null;

// Get all the buttons
const buttons = document.querySelectorAll('.btn');

buttons.forEach(button => {
  button.addEventListener('click', function() {
    const buttonValue = this.innerText;

    if (buttonValue >= '0' && buttonValue <= '9') {
      handleNumber(buttonValue);
    } else if (buttonValue === 'C') {
      clearScreen();
    } else if (buttonValue === 'DEL') {
      deleteLast();
    } else if (buttonValue === '.') {
      handleDecimal();
    } else if (buttonValue === '=') {
      calculateResult();
    } else {
      handleOperator(buttonValue);
    }
  });
});
```

```
// Handle number input
```

```
function handleNumber(number) {
```

```
    if (currentInput === '0' && number === '0') return; // Prevent leading zeros
```

```
    currentInput += number;
```

```
    updateScreen(currentInput);
```

```
}
```

```
// Handle operator input
```

```
function handleOperator(operator) {
```

```
    currentOperator = operator;
```

```
    updateScreen(operator);
```

```
    if (currentInput === '') return;
```

```
    if (firstOperand === null) {
```

```
        firstOperand = parseFloat(currentInput);
```

```
    } else {
```

```
        firstOperand = calculate(firstOperand, parseFloat(currentInput), currentOperator);
```

```
        updateScreen(firstOperand);
```

```
    }
```

```
    currentInput = '';
```

```
}
```

```
// Perform the calculation
```

```
function calculate(a, b, operator) {
```

```
    switch (operator) {
```

```
        case '+':
```

```
            return a + b;
```

```
        case '-':
```

```
            return a - b;
```

```
        case '*':
```

```

        return a * b;
    case '/':
        return b === 0 ? 'Error' : a / b;
    default:
        return b;
    }
}

// Update the screen with input or result
function updateScreen(value) {
    screen.innerText = value;
}

// Clear the screen and reset values
function clearScreen() {
    currentInput = '';
    firstOperand = null;
    currentOperator = '';
    updateScreen('0');
}

// Delete the last character
function deleteLast() {
    currentInput = currentInput.slice(0, -1);
    updateScreen(currentInput || '0');
}

// Handle decimal point input
function handleDecimal() {
    if (!currentInput.includes('.')) {
        currentInput += '.';
    }
}

```



```
    updateScreen(currentInput);  
  }  
}
```

// Calculate the final result

```
function calculateResult() {  
  if (firstOperand !== null && currentInput !== '') {  
    const result = calculate(firstOperand, parseFloat(currentInput), currentOperator);  
    updateScreen(result);  
    firstOperand = null;  
    currentInput = result;  
  }  
}
```

Screenshot of the Front Page

