## Level 1 task 3

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Basic Calculator</title>
    <style>
        /* General Styles */
        body {
            font-family: Arial, sans-serif;
            background-color: #f4f4f4;
            margin: 0;
            display: flex;
            justify-content: center;
            align-items: center;
            height: 100vh;
        }

        /* Calculator Container */
        .calculator {
            background: white;
            padding: 20px;
            border-radius: 10px;
            box-shadow: 0 5px 15px rgba(0, 0, 0, 0.2);
            width: 300px;
        }

        /* Display Screen */
        .display {
            width: 100%;
            height: 50px;
            margin-bottom: 10px;
            background: #ddd;
            border: none;
            border-radius: 5px;
            text-align: right;
            padding: 10px;
            font-size: 1.5em;
        }

        /* Button Grid */
        .buttons {
            display: grid;
            grid-template-columns: repeat(4, 1fr);
```

```
            gap: 10px;
        }

        /* Buttons */
        .button {
            background-color: #4CAF50;
            color: white;
            border: none;
            padding: 15px;
            font-size: 1.2em;
            border-radius: 5px;
            cursor: pointer;
        }

        .button:hover {
            background-color: #45a049;
        }

        .button.operator {
            background-color: #f57c00;
        }

        .button.operator:hover {
            background-color: #e65100;
        }

        .button.clear {
            background-color: #d32f2f;
        }

        .button.clear:hover {
            background-color: #b71c1c;
        }

        .button.equals {
            grid-column: span 2;
            background-color: #0288d1;
        }

        .button.equals:hover {
            background-color: #01579b;
        }
    </style>
</head>
<body>

    <div class="calculator">
```

```
        <!-- Display -->
        <input type="text" class="display" id="display"
oninput="handleManualInput()">

        <!-- Buttons -->
        <div class="buttons">
            <button class="button" onclick="appendNumber('7')">7</button>
            <button class="button" onclick="appendNumber('8')">8</button>
            <button class="button" onclick="appendNumber('9')">9</button>
            <button class="button operator" onclick="chooseOperator('/')">/</
button>

            <button class="button" onclick="appendNumber('4')">4</button>
            <button class="button" onclick="appendNumber('5')">5</button>
            <button class="button" onclick="appendNumber('6')">6</button>
            <button class="button operator" onclick="chooseOperator('*')">*</
button>

            <button class="button" onclick="appendNumber('1')">1</button>
            <button class="button" onclick="appendNumber('2')">2</button>
            <button class="button" onclick="appendNumber('3')">3</button>
            <button class="button operator" onclick="chooseOperator('-')">-</
button>

            <button class="button clear" onclick="clearDisplay()">C</button>
            <button class="button" onclick="appendNumber('0')">0</button>
            <button class="button equals" onclick="calculate()">=</button>
            <button class="button operator" onclick="chooseOperator('+')">+</
button>
        </div>
    </div>

    <script>
        // Variables to store current input and operation
        let currentInput = '';
        let previousInput = '';
        let operator = null;

        // Update the display
        function updateDisplay() {
            const display = document.getElementById('display');
            if (document.activeElement !== display) {
                display.value = currentInput;
            }
        }

        // Append a number to the current input
```

```
function appendNumber(number) {
    currentInput += number;
    updateDisplay();
}

// Handle manual input in the display
function handleManualInput() {
    const display = document.getElementById('display');
    currentInput = display.value;
}

// Choose an operator
function chooseOperator(op) {
    if (currentInput === '') return;
    if (previousInput !== '') calculate();
    operator = op;
    previousInput = currentInput;
    currentInput = '';
    updateDisplay();
}

// Clear the display
function clearDisplay() {
    currentInput = '';
    previousInput = '';
    operator = null;
    updateDisplay();
}

// Perform the calculation
function calculate() {
    if (previousInput === '' || currentInput === '' || operator === null) return;
    let result;
    const prev = parseFloat(previousInput);
    const current = parseFloat(currentInput);
    if (isNaN(prev) || isNaN(current)) return;

    switch (operator) {
        case '+':
            result = prev + current;
            break;
        case '-':
            result = prev - current;
            break;
        case '*':
            result = prev * current;
            break;
```

```
            case '/':
                result = current !== 0 ? prev / current : 'Error';
                break;
            default:
                return;
        }
        currentInput = result.toString();
        operator = null;
        previousInput = '';
        updateDisplay();
    }
</script>

</body>
</html>
```