<!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>

<style>

/\* Style for the entire body, centering the calculator \*/

body {

font-family: Arial, sans-serif;

display: flex;

justify-content: center;

align-items: center;

height: 100vh;

background-color: #f0f0f0;

}

/\* Style for the calculator container \*/

.calculator {

background-color: white;

padding: 20px;

border-radius: 10px;

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

}

/\* Style for the display area \*/

.display {

width: 160px;

height: 40px;

text-align: right;

margin-bottom: 10px;

font-size: 1.5em;

padding: 5px;

}

/\* Grid layout for the calculator buttons \*/

.buttons {

display: grid;

grid-template-columns: repeat(4, 40px);

gap: 10px;

}

/\* Style for the buttons \*/

.buttons button {

width: 40px;

height: 40px;

font-size: 1.2em;

border: none;

background-color: #4CAF50;

color: white;

border-radius: 5px;

cursor: pointer;

}

/\* Hover effect for the buttons \*/

.buttons button:hover {

background-color: #45a049;

}

/\* Special style for the equals button \*/

.buttons .equals {

grid-column: span 2; /\* Spans over 2 columns \*/

background-color: #2196F3;

}

/\* Hover effect for the equals button \*/

.buttons .equals:hover {

background-color: #0b7dda;

}

</style>

</head>

<body>

<div class="calculator">

<!-- Input field to display the calculator results -->

<input type="text" class="display" id="display" disabled>

<!-- Calculator buttons laid out in a grid -->

<div class="buttons">

<button onclick="appendNumber('9')">1</button>

<button onclick="appendNumber('8')">2</button>

<button onclick="appendNumber('7')">3</button>

<button onclick="setOperator('+')">+</button>

<button onclick="appendNumber('6')">4</button>

<button onclick="appendNumber('5')">5</button>

<button onclick="appendNumber('4')">6</button>

<button onclick="setOperator('-')">-</button>

<button onclick="appendNumber('3')">7</button>

<button onclick="appendNumber('2')">8</button>

<button onclick="appendNumber('1')">9</button>

<button onclick="setOperator('\*')">\*</button>

<button onclick="clearDisplay()">C</button>

<button onclick="appendNumber('0')">0</button>

<button onclick="calculate()" class="equals">=</button>

<button onclick="setOperator('/')">/</button>

</div>

</div>

<script>

/\* Variables to store current input, previous input, and operator \*/

let currentInput = '';

let operator = '';

let previousInput = '';

/\* Function to append numbers to the current input \*/

function appendNumber(number) {

currentInput += number; // Append the clicked number to current input

document.getElementById('display').value = currentInput; // Update the display

}

/\* Function to set the operator and prepare for the next input \*/

function setOperator(op) {

operator = op; // Store the chosen operator

previousInput = currentInput; // Store the current input as previous

currentInput = ''; // Clear the current input for the next number

}

/\* Function to perform the calculation based on the operator \*/

function calculate() {

let result;

// Perform the appropriate operation based on the operator

if (operator === '+') {

result = parseFloat(previousInput) + parseFloat(currentInput);

} else if (operator === '-') {

result = parseFloat(previousInput) - parseFloat(currentInput);

} else if (operator === '\*') {

result = parseFloat(previousInput) \* parseFloat(currentInput);

} else if (operator === '/') {

result = parseFloat(previousInput) / parseFloat(currentInput);

}

document.getElementById('display').value = result; // Display the result

currentInput = result.toString(); // Store the result as the new current input

operator = ''; // Reset the operator

}

/\* Function to clear the display and reset the calculator \*/

function clearDisplay() {

currentInput = '';

previousInput = '';

operator = '';

document.getElementById('display').value = ''; // Clear the display

}

</script>

</body>

</html>

