JavaScript Calculator

Objective:

The objective of this assignment is to create a simple calculator using **HTML, CSS, and JavaScript**. The calculator will perform basic arithmetic operations like addition, subtraction, multiplication, and division using the **`eval()`** function in JavaScript.

Contents:

Complete Code:

```
<!DOCTYPE html>

<html lang="en">

<head>

 <meta charset="UTF-8">

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

 <title>JavaScript Calculator</title>

 <style>

  /* Calculator container styling */

  .calculator {

    width: 300px;

    margin: 100px auto;

    padding: 20px;

    border-radius: 20px;

    box-shadow: 0px 8px 20px rgba(0, 0, 0, 0.2);

    background: linear-gradient(145deg, #1f1c2c, #928dab);

  }
```

```
/* Display styling */
input {
  width: 100%;
  height: 60px;
  margin-bottom: 20px;
  font-size: 24px;
  text-align: right;
  padding: 15px;
  border: none;
  border-radius: 12px;
  background-color: #2e2c38;
  color: #f9f9f9;
  box-shadow: inset 0px 4px 10px rgba(0, 0, 0, 0.15);
}

/* Button general styling */
button {
  width: 65px;
  height: 65px;
  font-size: 22px;
  font-weight: bold;
  margin: 10px;
  border: none;
  border-radius: 15px;
  cursor: pointer;
  background: linear-gradient(145deg, #f9f9f9, #ececec);
  color: #333;
  box-shadow: 0px 6px 15px rgba(0, 0, 0, 0.2), inset 0px -4px 8px rgba(255, 255, 255, 0.1);
```

```
  transition: background-color 0.3s ease, box-shadow 0.2s ease, transform 0.1s ease;
}

/* Button hover effects */
button:hover {
  background: linear-gradient(145deg, #ffffff, #f0f0f0);
  box-shadow: 0px 8px 18px rgba(0, 0, 0, 0.3), inset 0px -6px 12px rgba(255, 255, 255, 0.2);
  transform: translateY(-3px);
}

/* Operator buttons specific styling */
.operator {
  background: linear-gradient(145deg, #ff6b6b, #f06565);
  color: white;
}

/* Operator buttons hover effect */
.operator:hover {
  background: linear-gradient(145deg, #ff3b3b, #e63e3e);
}

/* Equal button styling */
.equal {
  background: linear-gradient(145deg, #38ada9, #3dcccc);
  color: white;
  font-size: 24px;
  width: 150px;
}
```

```
    /* Equal button hover effect */
    .equal:hover {
      background: linear-gradient(145deg, #2eada9, #1bb6b6);
    }

    /* Clear button specific styling */
    .clear {
      background: linear-gradient(145deg, #ff9f43, #ff8e29);
      color: white;
    }

    /* Clear button hover effect */
    .clear:hover {
      background: linear-gradient(145deg, #ff8c23, #ff7e0d);
    }

    /* Layout for button rows */
    .button-row {
      display: flex;
      justify-content: space-between;
    }
  </style>
</head>
<body>

  <div class="calculator">
    <input type="text" id="display" placeholder="0" disabled>
    <div class="button-row">
      <button class="clear" onclick="clearDisplay()">C</button>
```

```
  <button onclick="appendToDisplay('(')">(</button>
  <button onclick="appendToDisplay(')')">)</button>
  <button class="operator" onclick="appendToDisplay('/')">/</button>
 </div>
 <div class="button-row">
  <button onclick="appendToDisplay('7')">7</button>
  <button onclick="appendToDisplay('8')">8</button>
  <button onclick="appendToDisplay('9')">9</button>
  <button class="operator" onclick="appendToDisplay('*')">*</button>
 </div>
 <div class="button-row">
  <button onclick="appendToDisplay('4')">4</button>
  <button onclick="appendToDisplay('5')">5</button>
  <button onclick="appendToDisplay('6')">6</button>
  <button class="operator" onclick="appendToDisplay('-')">-</button>
 </div>
 <div class="button-row">
  <button onclick="appendToDisplay('1')">1</button>
  <button onclick="appendToDisplay('2')">2</button>
  <button onclick="appendToDisplay('3')">3</button>
  <button class="operator" onclick="appendToDisplay('+')">+</button>
 </div>
 <div class="button-row">
  <button onclick="appendToDisplay('0')">0</button>
  <button onclick="appendToDisplay('.')">.</button>
  <button class="equal" onclick="calculateResult()">=</button>
 </div>
</div>
```

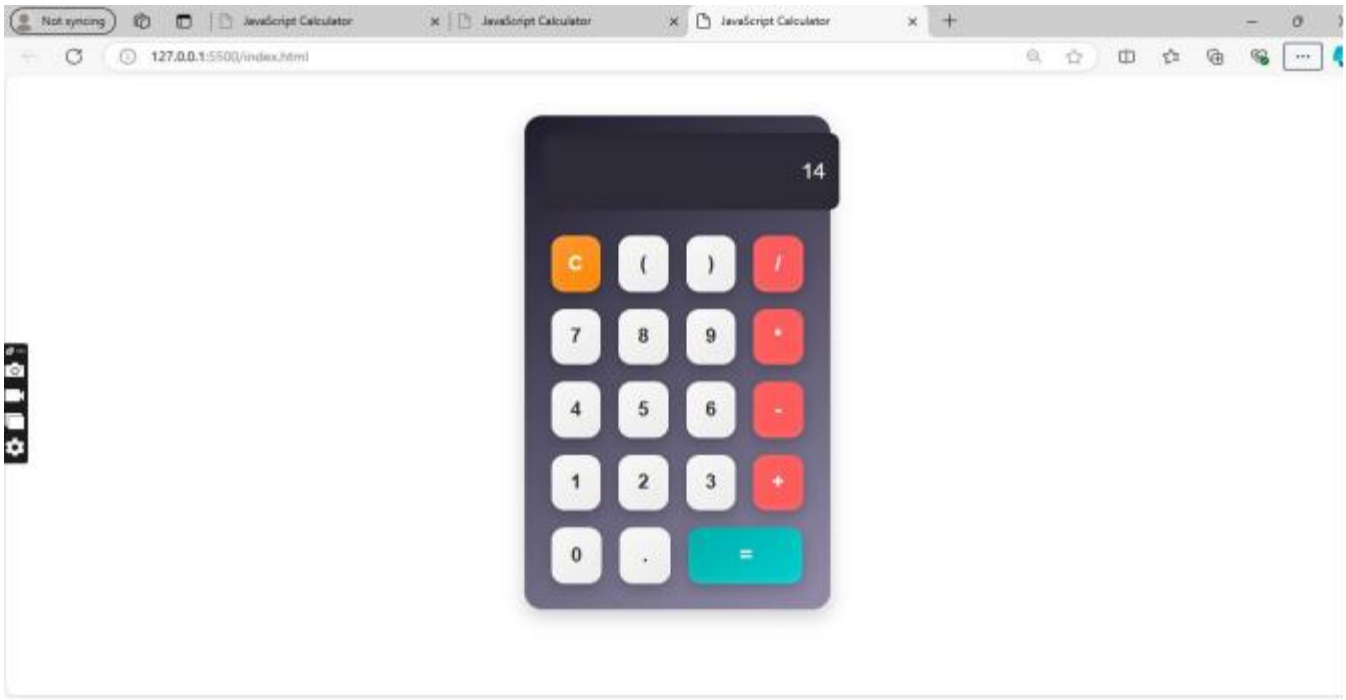
```
 <script>
  // Function to append values to the display
  function appendToDisplay(value) {
    document.getElementById('display').value += value;
  }

  // Function to clear the display
  function clearDisplay() {
    document.getElementById('display').value = '';
  }

  // Function to calculate the result using eval()
  function calculateResult() {
    try {
      const result = eval(document.getElementById('display').value);
      document.getElementById('display').value = result;
    } catch (error) {
      document.getElementById('display').value = 'Error';
    }
  }
 </script>

</body>
</html>
```

Output:


Not syncing
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JavaScript Calculator
JavaScript Calculator
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