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assignment8.html > html
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4    <title>Simple Calculator</title>
5    <style>
6      body {
7        font-family: Arial, sans-serif;
8        display: flex;
9        justify-content: center;
10       align-items: center;
11       height: 100vh;
12       background-color: #f4f4f4;
13       margin: 0;
14     }
15     .calculator {
16       width: 320px;
17       padding: 20px;
18       background-color: #fff;
19       box-shadow: 0 0 10px rgba(0, 0, 0, .1);
20       border-radius: 10px;
21     }
22     #display {
23       width: 100%;
24       height: 50px;
25       margin-bottom: 10px;
26       font-size: 24px;
27       text-align: right;
28       padding-right: 10px;
29       box-sizing: border-box;
30     }
31     .buttons {
32       display: grid;
33       grid-template-columns: repeat(4, 1fr);
34       gap: 10px;
35     }
36     button {
37       padding: 20px;
38       font-size: 20px;
39       background-color: #f0f0f0;
40       border: none;
41       cursor: pointer;
42       border-radius: 5px;
43       transition: background-color 0.3s ease;
44     }

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2   <html lang="en">
3   <head>
4   <style>
36     button {
41         cursor: pointer;
42         border-radius: 5px;
43         transition: background-color 0.3s ease;
44     }
45     button:hover {
46         background-color: #ddd;
47     }
48 </style>
49 </head>
50 <body>
51   <div class="calculator">
52     <input type="text" id="display" disabled>
53     <div class="buttons">
54       <button onclick="clearDisplay()">C</button>
55       <button onclick="deleteLast()">DEL</button>
56       <button onclick="appendToDisplay('%')">%</button>
57       <button onclick="appendToDisplay('/')">/</button>
58       <button onclick="appendToDisplay('7')">7</button>
59       <button onclick="appendToDisplay('8')">8</button>
60       <button onclick="appendToDisplay('9')">9</button>
61       <button onclick="appendToDisplay('.')">.</button>
62       <button onclick="appendToDisplay('4')">4</button>
63       <button onclick="appendToDisplay('5')">5</button>
64       <button onclick="appendToDisplay('6')">6</button>
65       <button onclick="appendToDisplay('-')">-</button>
66       <button onclick="appendToDisplay('1')">1</button>
67       <button onclick="appendToDisplay('2')">2</button>
68       <button onclick="appendToDisplay('3')">3</button>
69       <button onclick="appendToDisplay('+')">+</button>
70       <button onclick="appendToDisplay('0')">0</button>
71       <button onclick="appendToDisplay('.')">.</button>
72       <button onclick="calculateResult()">=</button>
73     </div>
74   </div>
75   <script>
76     const display = document.getElementById("display");
77
78     function clearDisplay() {
79       display.value = "";
80     }

```

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assignment8.html > html
2  <html lang="en">
50 <body>
51   <div class="calculator">
52     <div class="buttons">
53       <button onclick="calculateResult()">=</button>
54     </div>
55   </div>
56 </div>
57 <script>
58   const display = document.getElementById("display");
59
60   function clearDisplay() {
61     display.value = "";
62   }
63
64   function deleteLast() {
65     display.value = display.value.slice(0, -1);
66   }
67
68   function appendToDisplay(value) {
69     if (display.value.replace(/[\d]/g, "").length >= 4 && !isOperator(value)) {
70       alert("The calculator does not accept more than four digits.");
71       return;
72     }
73     if (!isValidInput(value)) {
74       alert("Invalid input. Only numbers and basic operators are allowed.");
75       return;
76     }
77     display.value += value;
78   }
79
80   function isValidInput(value) {
81     const validCharacters = /^[0-9.+\\-*/%]$/;
82     return validCharacters.test(value);
83   }
84
85   function isOperator(value) {
86     const operators = ['+', '-', '*', '/', '%'];
87     return operators.includes(value);
88   }
89
90   function calculateResult() {
91     try {
92       if (display.value) {
93         display.value = eval(display.value);
94       }
95     } catch {
96       // Handle error
97     }
98   }

```

```
2    <html lang="en">
50    <body>
75        <script>
98            function isValidInput(value) {
101                }
102
103            function isOperator(value) {
104                const operators = ['+', '-', '*', '/', '%'];
105                return operators.includes(value);
106            }
107
108            function calculateResult() {
109                try {
110                    if (display.value) {
111                        display.value = eval(display.value);
112                    }
113                } catch (error) {
114                    alert("Invalid operation.");
115                }
116            }
117        </script>
118    </body>
119 </html>
```

