10/15/24, 7:17 PM script.js

## script.js

```
1
    class Calculator {
 2
        constructor(previousOperandTextElement, currentOperandTextElement) {
 3
          this.previousOperandTextElement = previousOperandTextElement
          this.currentOperandTextElement = currentOperandTextElement
 4
 5
          this.clear()
 6
        }
 7
8
        clear() {
9
          this.currentOperand = ''
          this.previousOperand = ''
10
11
          this.operation = undefined
12
        }
13
14
        delete() {
          this.currentOperand = this.currentOperand.toString().slice(0, -1)
15
        }
16
17
18
        appendNumber(number) {
19
          if (number === '.' && this.currentOperand.includes('.')) return
20
          this.currentOperand = this.currentOperand.toString() + number.toString()
21
        }
22
        chooseOperation(operation) {
23
          if (this.currentOperand === '') return
24
25
          if (this.previousOperand !== '') {
            this.compute()
26
27
          }
28
          this.operation = operation
29
          this.previousOperand = this.currentOperand
          this.currentOperand = ''
30
31
        }
32
        compute() {
33
34
          let computation
35
          const prev = parseFloat(this.previousOperand)
36
          const current = parseFloat(this.currentOperand)
          if (isNaN(prev) || isNaN(current)) return
37
          switch (this.operation) {
38
            case '+':
39
              computation = prev + current
40
41
              break
42
            case '-':
43
              computation = prev - current
              break
44
            case '*':
45
              computation = prev * current
46
47
              break
            case '÷':
48
```

```
49
              computation = prev / current
50
             break
           default:
51
              return
52
53
         }
54
         this.currentOperand = computation
55
         this.operation = undefined
         this.previousOperand = ''
56
57
       }
58
59
       getDisplayNumber(number) {
         const stringNumber = number.toString()
60
          const integerDigits = parseFloat(stringNumber.split('.')[0])
61
62
         const decimalDigits = stringNumber.split('.')[1]
         let integerDisplay
63
         if (isNaN(integerDigits)) {
64
           integerDisplay = ''
65
         } else {
66
           integerDisplay = integerDigits.toLocaleString('en', { maximumFractionDigits: 0 })
67
68
         if (decimalDigits != null) {
69
70
           return `${integerDisplay}.${decimalDigits}`
71
         } else {
           return integerDisplay
72
73
         }
74
       }
75
       updateDisplay() {
76
77
         this.currentOperandTextElement.innerText =
78
           this.getDisplayNumber(this.currentOperand)
79
         if (this.operation != null) {
80
           this.previousOperandTextElement.innerText =
              81
         } else {
82
           this.previousOperandTextElement.innerText = ''
83
84
         }
85
       }
86
     }
87
88
     const numberButtons = document.querySelectorAll('[data-number]')
89
     const operationButtons = document.querySelectorAll('[data-operation]')
90
     const equalsButton = document.querySelector('[data-equals]')
91
92
     const deleteButton = document.querySelector('[data-delete]')
93
     const allClearButton = document.querySelector('[data-all-clear]')
94
     const previousOperandTextElement = document.querySelector('[data-previous-operand]')
     const currentOperandTextElement = document.querySelector('[data-current-operand]')
95
96
97
     const calculator = new Calculator(previousOperandTextElement, currentOperandTextElement)
98
```

```
99
       numberButtons.forEach(button => {
100
         button.addEventListener('click', () => {
101
           calculator.appendNumber(button.innerText)
           calculator.updateDisplay()
102
103
         })
104
       })
105
       operationButtons.forEach(button => {
106
         button.addEventListener('click', () => {
107
           calculator.chooseOperation(button.innerText)
108
109
           calculator.updateDisplay()
110
         })
111
       })
112
       equalsButton.addEventListener('click', button => {
113
         calculator.compute()
114
115
         calculator.updateDisplay()
116
       })
117
       allClearButton.addEventListener('click', button => {
118
119
         calculator.clear()
         calculator.updateDisplay()
120
121
       })
122
123
       deleteButton.addEventListener('click', button => {
         calculator.delete()
124
125
         calculator.updateDisplay()
126
       })
```