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1  'Anthony Shore
2  'RCET0265
3  'Spring 2020
4  'Better Calculator
5  'https://github.com/shoranth/AVS-VS-S20
6
7  Option Compare Text
8
9  Module BetterCalculator
10
11      Sub Main()
12          Dim firstNumber As String
13          Dim secondNumber As String
14          Dim userChoice As String
15          Dim quitProgram As Boolean
16          Dim promptUser1 As Boolean
17          Dim promptUser2 As Boolean
18
19          userChoice = ""
20          firstNumber = ""
21          secondNumber = ""
22
23          'While loop used to make the calculator run again until the user quits
24          Do Until quitProgram = True
25
26              promptUser1 = True
27              promptUser2 = True
28              quitProgram = False
29
30              '1st number code
31              Console.WriteLine("Please enter two numbers. Enter ""Q"" at any
32              time to quit.")
33              Console.WriteLine("Choose a number")
34              Do While promptUser1 = True
35                  firstNumber = Console.ReadLine()
36                  If (firstNumber = "q") Then
37                      Environment.Exit(0)
38                  End If
39                  Try
40                      firstNumber = CInt(firstNumber)
41                      Console.WriteLine("You entered " & Chr(34) & firstNumber &
42                      Chr(34))
43                      promptUser1 = False
44                      Catch ex As Exception
45                          Console.WriteLine("You entered " & Chr(34) & firstNumber &
46                          Chr(34))
47                          Console.WriteLine("Please try again and enter a whole
48                          number")
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45         promptUser1 = True
46     End Try
47 Loop
48
49 Console.WriteLine()
50
51 '2nd number code
52 Console.WriteLine("Please enter a 2nd number...")
53 Do While promptUser2 = True
54     secondNumber = Console.ReadLine
55     If (secondNumber = "q") Then
56         Environment.Exit(0)
57     End If
58     Try
59         secondNumber = CInt(secondNumber)
60         Console.WriteLine("You entered " & Chr(34) & secondNumber & Chr(34))
61         promptUser2 = False
62     Catch ex As Exception
63         Console.WriteLine("Please enter a whole number")
64         Console.WriteLine("You entered " & Chr(34) & secondNumber & Chr(34))
65         promptUser2 = True
66     End Try
67 Loop
68
69 Console.WriteLine()
70
71 'user selects which operation they want to perform on the entered numbers
72 Do
73     Console.WriteLine("Choose one of the following options:")
74     Console.WriteLine("1. Add")
75     Console.WriteLine("2. Subtract")
76     Console.WriteLine("3. Multiply")
77     Console.WriteLine("4. Divide")
78     userChoice = Console.ReadLine()
79     If (userChoice = "q") Then
80         Environment.Exit(0)
81     End If
82     Console.WriteLine("You entered " & Chr(34) & userChoice & Chr(34))
83 Loop Until (userChoice = "1") Or (userChoice = "2") Or (userChoice = "3") Or (userChoice = "4")
84
85 'addition code
86 If userChoice = "1" Then
87     Try
88         Console.WriteLine(CDb1(firstNumber) + CDb1(secondNumber))
```

```
89         Catch ex As InvalidCastException
90             Console.WriteLine("Please enter a whole number")
91         Catch ex As Exception
92             Console.WriteLine("You broke it")
93         End Try
94
95         'Subtraction code
96     ElseIf userChoice = "2" Then
97         Try
98             Console.WriteLine(firstNumber - secondNumber)
99         Catch ex As InvalidCastException
100             Console.WriteLine("Please enter a whole number")
101         Catch ex As Exception
102             Console.WriteLine("You broke it")
103         End Try
104
105         'multiplication code
106     ElseIf userChoice = "3" Then
107         Try
108             Console.WriteLine(firstNumber * secondNumber)
109         Catch ex As InvalidCastException
110             Console.WriteLine("Please enter a whole number")
111         Catch ex As Exception
112             Console.WriteLine("You broke it")
113         End Try
114
115         'division code
116     ElseIf userChoice = "4" Then
117         Try
118             Console.WriteLine(firstNumber / secondNumber)
119         Catch ex As InvalidCastException
120             Console.WriteLine("Please enter a whole number")
121         Catch ex As Exception
122             Console.WriteLine("You broke it")
123         End Try
124
125     Else
126         Console.WriteLine("Invalid Selection")
127     End If
128     Console.WriteLine("Press Enter To Run Again. Enter Q to quit.")
129
130     'user enters q to quit the program or the program will repeat when ↵
131     enter is pressed
132     If Console.ReadLine() = "q" Then
133         Console.WriteLine("You entered ""Q""")
134         Console.WriteLine("Have a nice day.")
135         Console.WriteLine("Please press enter to close this window.")
136         Console.ReadLine()
137         quitProgram = True
```

```
137         Else
138             quitProgram = False
139         End If
140
141         Console.Clear()
142     Loop
143 End Sub
144
145 End Module
146
```