```
1 'Doyle Shaw
 2 'RCET0265
 3 'Spring 2020
 4 'Simple_Calculator
 5 'https://github.com/shawdoyl/DHS-VS-S20
 6
7 Option Explicit On
 8 Option Strict On
9 Option Compare Text
10
11 Module BetterCalculator
12
13
       Sub Main()
14
           Dim firstNumber As Integer
15
           Dim secondNumber As Integer
16
           Dim mathFunction As String
           Dim quitProgram As Boolean
17
18
           Dim promptUser As Boolean
19
20
           promptUser = True
21
           quitProgram = False
22
23
           Do While quitProgram = False
24
25
                Console.WriteLine("Please enter first number. Press Enter to
                  proceed.")
                Console.WriteLine("Press Q to to Exit at any time.")
26
27
                Do While promptUser = True
28
                    Try
29
                        firstNumber = CInt(Console.ReadLine())
30
                        promptUser = False
                    Catch ex As Exception
31
                        Console.WriteLine("Please Enter a Whole Number.")
32
33
                        promptUser = True
34
                    End Try
35
                Loop
36
                promptUser = True
37
                Console.WriteLine("You entered " & firstNumber & ".")
38
39
                Console.WriteLine("Please enter second number. Press Enter to
                  proceed.")
40
                Do While promptUser = True
41
42
                        secondNumber = CInt(Console.ReadLine())
43
                        promptUser = False
44
                    Catch ex As Exception
                        Console.WriteLine("Please Enter a Whole Number.")
45
46
                        promptUser = True
47
                    End Try
48
                Loop
49
                promptUser = True
50
```

```
Console.WriteLine("Please enter desired function. Press Enter to
                  finish calcultion.")
                Console.WriteLine("1. product(*)")
52
53
                Console.WriteLine("2. sum(+)")
54
                Console.WriteLine("3. difference(-)")
55
                Console.WriteLine("4. quotient(/)")
56
                Console.WriteLine("5. exponent(^)")
57
                mathFunction = Console.ReadLine()
58
59
                If mathFunction = "Sum" Or mathFunction = "Addition" Or mathFunction →
                  = "Add" Or mathFunction = "+" Or mathFunction = "2" Then
60
                        Console.WriteLine(firstNumber & "+" & secondNumber & "=" &
61
                        firstNumber + secondNumber)
62
                    Catch ex As InvalidCastException
63
                        Console.WriteLine("Please Enter a Whole Number.")
64
                    Catch ex As Exception
65
                        Console.WriteLine("This is broken now.")
66
                ElseIf mathFunction = "*" Or mathFunction = "Multiply" Or
67
                  mathFunction = "Multiplication" Or mathFunction = "Product" Or
                  mathFunction = "Mult" Or mathFunction = "1" Then
68
                        Console.WriteLine(firstNumber & "*" & secondNumber & "=" &
69
                        firstNumber * secondNumber)
70
                    Catch ex As InvalidCastException
71
                        Console.WriteLine("Please Enter a Whole Number.")
72
                    Catch ex As Exception
73
                        Console.WriteLine("This is broken now.")
74
                    End Try
                ElseIf mathFunction = "-" Or mathFunction = "Subtract" Or
75
                  mathFunction = "Minus" Or mathFunction = "Difference" Or
                  mathFunction = "Sub" Or mathFunction = "3" Then
76
                    Try
77
                        Console.WriteLine(firstNumber & "-" & secondNumber & "=" &
                        firstNumber - secondNumber)
78
                    Catch ex As InvalidCastException
79
                        Console.WriteLine("Please Enter a Whole Number.")
80
                    Catch ex As Exception
81
                        Console.WriteLine("This is broken now.")
82
                    End Try
                ElseIf mathFunction = "Quotient" Or mathFunction = "/" Or
83
                  mathFunction = "Divide" Or mathFunction = "Division" Or
                  mathFunction = "Div" Or mathFunction = "4" Then
84
                    Try
                        Console.WriteLine(firstNumber & "/" & secondNumber & "=" &
85
                        firstNumber / secondNumber)
86
                    Catch ex As InvalidCastException
87
                        Console.WriteLine("Please Enter a Whole Number.")
88
                    Catch ex As Exception
89
                        Console.WriteLine("This is broken now.")
90
                    End Try
```

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... {\tt Github-VB\DHS-VS-S20\BetterCalculator\BetterCalculator.vb}
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ElseIf mathFunction = "Exponent" Or mathFunction = "^" Or
 91
                   mathFunction = "To the Power of" Or mathFunction = "5" Then
 92
                         Console.WriteLine(firstNumber & "^" & secondNumber & "=" &
 93
                          firstNumber ^ secondNumber)
 94
                     Catch ex As InvalidCastException
 95
                         Console.WriteLine("Please Enter a Whole Number.")
 96
                     Catch ex As Exception
 97
                         Console.WriteLine("This is broken now.")
 98
                     End Try
 99
                 Else
                     Console.WriteLine("That is not an appropriate Response.")
100
101
                 End If
102
103
                 Console.WriteLine("Press Enter to continue, enter Q then Enter to
                   quit program.")
104
                 If Console.ReadLine() = "q" Then
105
106
                     quitProgram = True
107
                 Else
108
                     quitProgram = False
                 End If
109
110
                 Console.Clear()
111
112
113
             Loop
114
115
             Console.WriteLine("Have A Nice Day.")
116
             Console.ReadLine()
117
118
         End Sub
119
120
121 End Module
```