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1 'Dane Davids
2 'RCET 0265
3 'Sprint-1 & Sprint-2
4 'Convert string to integer
5
6 Option Explicit On
7 Option Strict On
8 Option Compare Binary
9 Public Class SprintForm
10     Private Function IsWayTooLong(ByVal numberFromZeroToFifteen As Integer) As String
11         If numberFromZeroToFifteen = 0 Then
12             Return "Your number is: Zero"
13         End If
14         If numberFromZeroToFifteen = 1 Then
15             Return "Your number is: One"
16         End If
17         If numberFromZeroToFifteen = 2 Then
18             Return "Your number is: Two"
19         End If
20         If numberFromZeroToFifteen = 3 Then
21             Return "Your number is: Three"
22         End If
23         If numberFromZeroToFifteen = 4 Then
24             Return "Your number is: Four"
25         End If
26         If numberFromZeroToFifteen = 5 Then
27             Return "Your number is: Five"
28         End If
29         If numberFromZeroToFifteen = 6 Then
30             Return "Your number is: Six"
31         End If
32         If numberFromZeroToFifteen = 7 Then
33             Return "Your number is: Seven"
34         End If
35         If numberFromZeroToFifteen = 8 Then
36             Return "Your number is: Eight"
37         End If
38         If numberFromZeroToFifteen = 9 Then
39             Return "Your number is: Nine"
40         End If
41         If numberFromZeroToFifteen = 10 Then
42             Return "Your number is: Ten"
43         End If
44         If numberFromZeroToFifteen = 11 Then
45             Return "Your number is: Eleven"
46         End If
47         If numberFromZeroToFifteen = 12 Then
48             Return "Your number is: Twelve"
49         End If
50         If numberFromZeroToFifteen = 13 Then
51             Return "Your number is: Thirteen"
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52     End If
53     If numberFromZeroToFifteen = 14 Then
54         Return "Your number is: Fourteen"
55     End If
56     If numberFromZeroToFifteen = 15 Then
57         Return "Your number is: Fifteen"
58     End If
59     If numberFromZeroToFifteen < 0 Then
60
61         Return "Your number is: Too Low"
62     End If
63     If numberFromZeroToFifteen > 15 Then
64         Return "Your number is: Too High"
65     End If
66 End Function
67 'This is the working code from Sprints 1 and 2
68 Private Function ValidateAndConvert(ByVal convertThisString As String, ByRef ↗
    toThisInteger As Integer) As String
69     Dim message As String = ""
70     Try
71         toThisInteger = CInt(convertThisString)
72     Catch ex As Exception
73         message = "Must contain a number"
74         If convertThisString = "" Then message = "is empty"
75     End Try
76     Return message
77 End Function
78 'Do Not change this code other that comment/uncomment the lines indicated
79 Private Sub GetUserInput() Handles Me.Load
80     Me.Hide()
81     Dim tempNum As Integer = 0
82     Dim userMessage As String = "Please Enter A Number Between 0 and 15" _
83 & vbNewLine & "Type Q to Quit"
84     Do
85         userMessage = InputBox(userMessage, "Hello", "")
86         If userMessage <> "Q" And userMessage <> "" Then
87             userMessage = ValidateAndConvert(userMessage, tempNum)
88             'If userMessage = "" Then userMessage = IsWayTooLong(tempNum) ↗
89             'Replace this Line
90             If userMessage = "" Then userMessage = ShortAndSweet(tempNum) ↗
91             'With this one
92         End If
93     Loop Until userMessage = "Q" Or userMessage = ""
94     Me.Close()
95 End Sub
96 'In as few lines as possible produce the same results as the function ↗
97 IsWayTooLong()
98 'Hint use a loop and a List or Array
99 'Also only have one return statement at the end
100 Private Function ShortAndSweet(ByVal numberFromZeroToFifteen As Integer) As ↗
    String
101     'Your code here

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99      If numberFromZeroToFifteen = 1 Then, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
100          Return "Your number is: " & numberFromZeroToFifteen
101      ElseIf numberFromZeroToFifteen < 0 Then
102          Return "Your number is: Too Low"
103      End If
104  End Function
105
106
107  'Lines below are code that was written by me. Function works similarly to _
108  'the one given by Tim In sprint 3, but because Of the dimmed message; I _
109  'believe his will work more efficiently than mine, As well As being _
110  'easier To determine what Is happening.
111
112  'Private Sub TestValidateAndConvert() Handles Me.Load
113  '    Dim count As Integer = 0
114  '    Dim result As Integer = 0
115  '    Dim pad As Integer = 15
116  '    Dim report As String = ""
117  '    Dim temp As String = ""
118  '    Dim testData = New String(4, 4) {{ "5", "2", "17", "8", "42"}, {"6.7",
119  '    "3.14", "5.4", "5.5", "0.125"}, {"-21", "-32.1", "-4", "-4.5", "-4.4"},
120  '    {"", "", "", "", ""}, {"True", "False", "10010", "90210", "dog"}}
121  '    For row = 0 To 4
122  '        For column = 0 To 4
123  '            result = 0
124  '            temp = ValidateAndConvert(testData(row, column), result)
125  '            report &= ("Trying: " & testData(row, column)).PadRight(pad)
126  '            If row < 3 Then
127  '                If CStr(CInt(testData(row, column))) <> CStr(result) Or temp <> "" Then
128  '                    report &= " TEST FAIL" & vbNewLine
129  '                    report &= ("Result is: " & CStr(result)).PadRight(pad) & " : " & temp & vbNewLine
130  '                    report &= ("Should be: " & CStr(CInt(testData(row, column)))).PadRight(pad) & " : " & "<Empty>" & vbNewLine
131  '                Else
132  '                    report &= " TEST PASS" & vbNewLine
133  '                    count += 1
134  '                End If
135  '            ElseIf temp <> "is empty" And row = 3 Then
136  '                report &= " TEST FAIL" & vbNewLine
137  '                report &= ("Result is: " & CStr(result)).PadRight(pad) & " : " & temp & vbNewLine
138  '                report &= ("Should be: " & CStr(0)).PadRight(pad) & " : " & "is empty" & vbNewLine
139  '            ElseIf temp <> "Must contain a number" And row > 3 Then
140  '                report &= " TEST FAIL" & vbNewLine
141  '                report &= ("Result is: " & CStr(result)).PadRight(pad) & " : " & temp & vbNewLine
142  '                report &= ("Should be: " & CStr(0)).PadRight(pad) & " : " & "Must contain a number" & vbNewLine

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141         '           Else
142             '               report &= " TEST PASS" & vbNewLine
143             '               count += 1
144             '           End If
145         '       Next
146     '   Next
147     '   Console.WriteLine(report & "Passed " & CStr(count) & " of 25 tests.
148     '   Score: " & CStr((count / 25) * 100) & "%")
149     '   MessageBox.Show("Passed " & CStr(count) & " of 25 tests. Score: " & CStr
150     '   ((count / 25) * 100) & "%")
151 'End Sub
152
153 'Private Function ValidateAndConvert(ByRef convertThisString As String,
154 '                                     ByRef toThisInteger As Integer) As
155 '   String
156 '       'Try and catch attempts to convert a string to integer
157 '       Try
158 '           toThisInteger = CInt(convertThisString)
159 '       Catch ex As Exception
160 '
161 '           'If statement is placed to check if string is empty, or else the _
162 '           'output will tell the user to input a number
163 '           If convertThisString = "" Then
164 '               ValidateAndConvert = "is empty"
165 '           Else
166 '               ValidateAndConvert = "Must contain a number"
167 '           End If
168 '           If ValidateAndConvert = "" Then
169 '
170 '               End If
171 '           End Try
172 '
173 '       Return (ValidateAndConvert)
174 'End Function
175
176 'Private Sub ExitButton_Click(sender As Object, e As EventArgs) Handles _
177 '   ExitButton.Click
178 '       Me.Close()
179 'End Sub
180 End Class
181
```