

```
1 Option Strict On
2 Option Explicit On
3
4
5 Public Class Form1
6
7     Dim errors As Boolean = False
8     Dim stockNameDecisionSummary As String = ""
9
10    Private Sub CalculateToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles CalculateToolStripMenuItem.Click
11        Dim mondayPrice As Double
12        Dim tuesdayPrice As Double
13        Dim wednesdayPrice As Double
14        Dim stockName As String
15        Dim stockDecision As String
16        Dim blankStringList As New List(Of String)
17
18
19        InputValidation(mondayPrice, tuesdayPrice, wednesdayPrice, stockName)
20        stockName = nameTextBox.Text
21        If errors = False Then
22
23            mondayPrice = Double.Parse(monPriceTextBox.Text)
24            tuesdayPrice = Double.Parse(tuesPriceTextBox.Text)
25            wednesdayPrice = Double.Parse(wedPriceTextBox.Text)
26            buySellHoldTextbox.Text = Decision(mondayPrice, tuesdayPrice, wednesdayPrice)
27            stockDecision = buySellHoldTextbox.Text
28
29            stockNameDecisionSummary += "Stock name: " & stockName & " " & "Decision: " & stockDecision & vbNewLine
30
31
32        End If
33
34
35
36    End Sub
37    Private Function Decision(ByVal mondayPrice As Double, ByVal tuesdayPrice As Double, ByVal wednesdayPrice As Double) As String
38        Dim result As String
39        Dim n1 As Double
40        Dim n2 As Double
41        Dim n3 As Double
42        n1 = mondayPrice
43        n2 = tuesdayPrice
44        n3 = wednesdayPrice
45        Dim choice As Boolean
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46
47
48
49     choice = True
50
51     result = ""
52
53     If n1 < n2 And n2 - n1 < n3 - n2 Then
54         result = "Buy"
55     ElseIf n1 > n2 And n1 - n2 < n2 - n3 Then
56         result = "Sell"
57     ElseIf choice = True Then
58         result = "Hold"
59     End If
60
61     Return result
62 End Function
63 Private Sub InputValidation(mondayPrice As Double, tuesdayPrice As Double, ↗
wednesdayPrice As Double, stockName As String)
64     Dim errorList As New List(Of String)
65     Dim sErrors As String = ""
66
67     If nameTextBox.Text = "" Then
68         errorList.Add("Stock name cannot be empty")
69         errors = True
70
71     End If
72
73     If monPriceTextBox.Text = "" Then
74         errorList.Add("Monday price cannot be blank")
75         errors = True
76     ElseIf Double.TryParse(monPriceTextBox.Text, mondayPrice) Then
77     Else errorList.Add("Invalid Monday Price")
78         errors = True
79
80     End If
81
82     If tuesPriceTextBox.Text = "" Then
83         errorList.Add("Tuesday price cannot be blank")
84         errors = True
85
86     ElseIf Double.TryParse(tuesPriceTextBox.Text, tuesdayPrice) Then
87     Else errorList.Add("Invalid Tuesday Price")
88         errors = True
89
90     End If
91
92     If wedPriceTextBox.Text = "" Then
93         errorList.Add("Wednesday price cannot be empty")
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94         errors = True
95
96     ElseIf Double.TryParse(wedPriceTextBox.Text, wednesdayPrice) Then
97     Else errorList.Add("Invalid Wednesday Price")
98         errors = True
99
100    End If
101
102    If errors = True Then
103        For Each item As String In errorList
104            sErrors &= item & " " & vbNewLine
105        Next
106        MessageBox.Show(sErrors, "Errors", MessageBoxButtons.OK)
107    End If
108 End Sub
109 Private Sub ClearToolStripMenuItem_Click(sender As Object, e As EventArgs) ➦
110     Handles ClearToolStripMenuItem.Click
111     nameTextBox.Text = ""
112     monPriceTextBox.Text = ""
113     tuesPriceTextBox.Text = ""
114     wedPriceTextBox.Text = ""
115     buySellHoldTextbox.Text = ""
116 End Sub
117 Private Sub ExitToolStripMenuItem_Click(sender As Object, e As EventArgs) ➦
118     Handles ExitToolStripMenuItem.Click
119     Me.Close()
120 End Sub
121 Private Sub SummaryToolStripMenuItem_Click(sender As Object, e As ➦
122     EventArgs) Handles SummaryToolStripMenuItem.Click
123     MessageBox.Show(stockNameDecisionSummary, "Summary", ➦
124         MessageBoxButtons.OK)
125 End Sub
126 End Class
```