Module 2 Challenge - VBA

Thursday, May 11, 2023

10:44 PM

Sub Stocks()

'define each variable

Dim Stock\_Name As String

Dim Summary\_Table\_Row As Double

Dim Yearly\_Change As Double

Dim Percent\_Change As Double

Dim Total\_Volume As LongLong

Dim opening\_price As Double

Dim closing\_price As Double

Dim maxvalue As Double

Dim minvalue As Double

Dim maxvolume As LongLong

Dim ticker As String

'run so code works on each sheet

For Each ws In ThisWorkbook.Worksheets

ws.Activate

'name variable starting values

Summary\_Table\_Row = 2

Yearly\_Change = 0

Num1 = 2

Total\_Volumne = 0

lastrow = Cells(Rows.Count, 1).End(xlUp).Row

'label new columns

Cells(1, 9) = "Stock Name"

Cells(1, 10) = "Yearly Change"

Cells(1, 11) = "Percent Change"

Cells(1, 12) = "Total Volume"

Cells(2, 15) = "Greatest % Increase"

Cells(3, 15) = "Greatest % Decrease"

Cells(4, 15) = "Greatest Total Volume"

Cells(1, 16) = "Stock Name"

Cells(1, 17) = "Value"

'if statements to search through original table

For Row = 2 To lastrow

If Cells(Row, 1).Value <> Cells(Row - 1, 1).Value Then

Stock\_Name = Cells(Row, 1).Value

opening\_price = Cells(Row, 3).Value

Range("I" & Summary\_Table\_Row).Value = Stock\_Name

End If

If Cells(Row, 1).Value <> Cells(Row + 1, 1).Value Then

closing\_price = Cells(Row, 6).Value

Total\_Volume = Cells(Row, 7) + Total\_Volume

Range("L" & Summary\_Table\_Row).Value = Total\_Volume

Yearly\_Change = closing\_price - opening\_price

Range("J" & Summary\_Table\_Row).Value = Yearly\_Change

Summary\_Table\_Row = Summary\_Table\_Row + 1

Total\_Volume = 0

Else

Total\_Volume = Total\_Volume + Cells(Row, 7)

'add color formatting to Yearly Change

If Cells(Summary\_Table\_Row, 10).Value > 0 Then

Cells(Summary\_Table\_Row, 10).Interior.ColorIndex = 50

Else

Cells(Summary\_Table\_Row, 10).Interior.ColorIndex = 9

End If

Percent\_Change = (Yearly\_Change / opening\_price) \* 100

Range("K" & Summary\_Table\_Row).Value = Percent\_Change

Range("K" & Summary\_Table\_Row).NumberFormat = "0.00"

'calculate greatest % increase and decrease

maxvalue = WorksheetFunction.max(Range("K" & lastrow))

minvalue = WorksheetFunction.Min(Range("K" & lastrow))

maxvolume = WorksheetFunction.max(Range("L" & lastrow))

If Cells(Row, 11).Value = maxvalue Then

maxvalue = Cells(2, 17).Value

ticker = Cells(2, 16).Value

End If

If Cells(Row, 10).Value = minvalue Then

minvalue = Cells(Row, 11).Value

ticker = Cells(3, 16).Value

End If

If Cells(Row + 1, 11).Value = maxvolume Then

maxvolume = Cells(Row, 11)

ticker = Cells(4, 16).Value

End If

End If

Next Row

Format colums

Columns("A:Q").AutoFit

Next ws

Yearly\_Change = 0

Total\_Volume = 0

End Sub