Visaual Basic

Challenge\_2

Isaac Rodriguez Ocampo

Sub MultipleYearStockData():

For Each ws In Worksheets

Dim WorksheetName As String

'Current row

Dim i As Long

'Start row of ticker block

Dim j As Long

'Index counter to fill Ticker row

Dim TickCount As Long

'Last row column A

Dim LastRowA As Long

'last row column I

Dim LastRowI As Long

'Variable for percent change calculation

Dim PerChange As Double

'Variable for greatest increase calculation

Dim GreatIncr As Double

'Variable for greatest decrease calculation

Dim GreatDecr As Double

'Variable for greatest total volume

Dim GreatVol As Double

'Get the WorksheetName

WorksheetName = ws.Name

'Create column headers

ws.Cells(1, 9).Value = "Ticker"

ws.Cells(1, 10).Value = "Yearly Change"

ws.Cells(1, 11).Value = "Percent Change"

ws.Cells(1, 12).Value = "Total Stock Volume"

ws.Cells(1, 16).Value = "Ticker"

ws.Cells(1, 17).Value = "Value"

ws.Cells(2, 15).Value = "Greatest % Increase"

ws.Cells(3, 15).Value = "Greatest % Decrease"

ws.Cells(4, 15).Value = "Greatest Total Volume"

'Set Ticker Counter to first row

TickCount = 2

'Set start row to 2

j = 2

'Find the last non-blank cell in column A

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

'MsgBox ("Last row in column A is " & LastRowA)

'Loop through all rows

For i = 2 To LastRowA

'Check if ticker name changed

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

'Write ticker in column I (#9)

ws.Cells(TickCount, 9).Value = ws.Cells(i, 1).Value

'Calculate and write Yearly Change in column J (#10)

ws.Cells(TickCount, 10).Value = ws.Cells(i, 6).Value - ws.Cells(j, 3).Value

'Conditional formating

If ws.Cells(TickCount, 10).Value < 0 Then

'Set cell background color to red

ws.Cells(TickCount, 10).Interior.ColorIndex = 3

Else

'Set cell background color to green

ws.Cells(TickCount, 10).Interior.ColorIndex = 4

End If

'Calculate and write percent change in column K (#11)

If ws.Cells(j, 3).Value <> 0 Then

PerChange = ((ws.Cells(i, 6).Value - ws.Cells(j, 3).Value) / ws.Cells(j, 3).Value)

'Percent formating

ws.Cells(TickCount, 11).Value = Format(PerChange, "Percent")

Else

ws.Cells(TickCount, 11).Value = Format(0, "Percent")

End If

'Calculate and write total volume in column L (#12)

ws.Cells(TickCount, 12).Value = WorksheetFunction.Sum(Range(ws.Cells(j, 7), ws.Cells(i, 7)))

'Increase TickCount by 1

TickCount = TickCount + 1

'Set new start row of the ticker block

j = i + 1

End If

Next i

'Find last non-blank cell in column I

LastRowI = ws.Cells(Rows.Count, 9).End(xlUp).Row

'MsgBox ("Last row in column I is " & LastRowI)

'Prepare for summary

GreatVol = ws.Cells(2, 12).Value

GreatIncr = ws.Cells(2, 11).Value

GreatDecr = ws.Cells(2, 11).Value

'Loop for summary

For i = 2 To LastRowI

'For greatest total volume\_check if next value is larger\_if yes take over a new value and populate ws.Cells

If ws.Cells(i, 12).Value > GreatVol Then

GreatVol = ws.Cells(i, 12).Value

ws.Cells(4, 16).Value = ws.Cells(i, 9).Value

Else

GreatVol = GreatVol

End If

'For greatest increase\_check if next value is larger\_if yes take over a new value and populate ws.Cells

If ws.Cells(i, 11).Value > GreatIncr Then

GreatIncr = ws.Cells(i, 11).Value

ws.Cells(2, 16).Value = ws.Cells(i, 9).Value

Else

GreatIncr = GreatIncr

End If

'For greatest decrease\_check if next value is smaller\_if yes take over a new value and populate ws.Cells

If ws.Cells(i, 11).Value < GreatDecr Then

GreatDecr = ws.Cells(i, 11).Value

ws.Cells(3, 16).Value = ws.Cells(i, 9).Value

Else

GreatDecr = GreatDecr

End If

'Write summary results in ws.Cells

ws.Cells(2, 17).Value = Format(GreatIncr, "Percent")

ws.Cells(3, 17).Value = Format(GreatDecr, "Percent")

ws.Cells(4, 17).Value = Format(GreatVol, "Scientific")

Next i

'Adjust column width automatically

Worksheets(WorksheetName).Columns("A:Z").AutoFit

Next ws

End Sub