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Sub CalculateYearlyChanges()

For Each ws In Worksheets

ws.Activate

Columns("I:Q").Delete

Dim lastRow As Long

Dim yearColumn As Long

Dim tickerColumn As Long

Dim dateColumn As Long

Dim openColumn As Long

Dim closeColumn As Long

Dim volColumn As Long

Dim currentYear As Integer

Dim yearOpen As Double

Dim yearClose As Double

Dim yearVol As Double

' Define the column numbers for each header

' Set ws = ThisWorkbook.Worksheets("StockData")

yearColumn = Cells(1, 1).End(xlToRight).Column + 1

tickerColumn = Application.Match("<ticker>", Rows(1), 0)

dateColumn = Application.Match("<date>", Rows(1), 0)

openColumn = Application.Match("<open>", Rows(1), 0)

closeColumn = Application.Match("<close>", Rows(1), 0)

volColumn = Application.Match("<vol>", Rows(1), 0)

' Add new headers for yearly data

' Cells(1, yearColumn).Value = "Year"

Cells(1, yearColumn).Value = ""

Cells(1, yearColumn + 1).Value = "ticker"

Cells(1, yearColumn + 2).Value = "Yearly Change"

Cells(1, yearColumn + 3).Value = "Yearly % Change"

Cells(1, yearColumn + 4).Value = "Yearly Volume"

' Initialize variables

yearClose = 0

yearVol = 0

currentTicker = Cells(2, tickerColumn).Value

' Loop through the data

lastRow = Cells(Rows.Count, dateColumn).End(xlUp).Row

yearOpen = Cells(2, openColumn).Value

k = 2

For p = 2 To lastRow

' Check if the year has changed

If Cells(p, tickerColumn).Value = currentTicker Then

yearClose = Cells(p, closeColumn).Value

yearVol = yearVol + Cells(p, volColumn).Value

Else

Cells(k, yearColumn).Value = ""

Cells(k, yearColumn + 1).Value = currentTicker

Cells(k, yearColumn + 2).Value = yearClose - yearOpen

Cells(k, yearColumn + 3).Value = "%" & (yearClose - yearOpen) / yearOpen \* 100

Cells(k, yearColumn + 4).Value = yearVol

yearClose = 0

yearVol = 0

yearOpen = Cells(p, openColumn).Value

currentTicker = Cells(p, tickerColumn).Value

k = k + 1

yearVol = yearVol + Cells(p, volColumn).Value

End If

' Update yearClose and yearVol for the current year

Next p

' Find the last row in the specified column

lastRow = Cells(Rows.Count, 10).End(xlUp).Row

' Loop through the data and add formatting ratings

For i = 2 To lastRow

cellValue = Cells(i, 10).Value

If cellValue < 0 Then

Cells(i, 10).Interior.Color = RGB(255, 0, 0) ' Red

Else

Cells(i, 10).Interior.Color = RGB(0, 255, 0) ' Green

End If

Next i

' Loop through the data and add formatting ratings

For i = 2 To lastRow

cellValue = Cells(i, 11).Value

If cellValue < 0 Then

Cells(i, 11).Interior.Color = RGB(255, 0, 0) ' Red

Else

Cells(i, 11).Interior.Color = RGB(0, 255, 0) ' Green

End If

Next i

Cells(1, yearColumn + 6).Value = ""

Cells(1, yearColumn + 7).Value = "ticker"

Cells(1, yearColumn + 8).Value = "value"

' Find the last row in the specified column

lastRow = Cells(Rows.Count, yearColumn + 2).End(xlUp).Row

' Initialize maxVal with the first value in the column

maxVal = Cells(2, yearColumn + 3).Value

tickerCode = 2

' Loop through the column to find the maximum value

For i = 2 To lastRow

If Cells(i, yearColumn + 3).Value > maxVal Then

maxVal = Cells(i, yearColumn + 3).Value

tickerCode = i

End If

Next i

Cells(2, yearColumn + 6).Value = "Greatest % Increase"

Cells(2, yearColumn + 7).Value = "Cells(tickerCode, tickerColumn).Value"

Cells(2, yearColumn + 8).Value = maxVal

minVal = Cells(2, yearColumn + 3).Value

tickerCode = 2

' Loop through the column to find the maximum value

For i = 2 To lastRow

If Cells(i, yearColumn + 3).Value < maxVal Then

maxVal = Cells(i, yearColumn + 3).Value

tickerCode = i

End If

Next i

Cells(3, yearColumn + 6).Value = "Greatest % Decrease"

Cells(3, yearColumn + 7).Value = "Cells(tickerCode, tickerColumn).Value"

Cells(3, yearColumn + 8).Value = maxVal

maxVol = 0

maxVol = Cells(2, yearColumn + 4).Value

tickerCode = 2

' Loop through the column to find the maximum value

For i = 2 To lastRow

If Cells(i, yearColumn + 4).Value < maxVal Then

maxVol = Cells(i, yearColumn + 4).Value

tickerCode = i

End If

Next i

Cells(4, yearColumn + 6).Value = "Greatest Total Volume"

Cells(4, yearColumn + 7).Value = Cells(tickerCode, tickerColumn).Value

Cells(4, yearColumn + 8).Value = maxVol

Columns("A:Q").AutoFit

Next ws

MsgBox ("complete")

End Sub