**VBA code for automatically calculating price change for each ticker.**

Sub ticker\_calculation()

'Declare variables assign values to be used later

Dim sh As Integer

Dim r As Variant

Dim last\_row As Variant

Dim sheet\_count As Integer

Dim sheet\_name As Variant

Dim ticker As Variant

Dim price\_change As Variant

Dim pct\_price\_change As Variant

Dim vol As Variant

Dim start\_price As Variant

Dim close\_price As Variant

Dim new\_ticker\_start\_row\_number As Variant

Dim start\_row As Variant 'this variable stores the starting position of our ouput

Dim opt As Integer

'Initializing variables

vol = 0

new\_ticker\_start\_row\_number = 2

'Step 1: To get the count of total sheets

sheet\_count = ActiveWorkbook.Worksheets.Count

'Step 2: Iterate through each sheet

For sh = 1 To sheet\_count

'Getting the sheet name

sheet\_name = ActiveWorkbook.Worksheets(sh).Name

'Activating the sheet

Sheets(sheet\_name).Activate

'clear the existing values in the columns J to M

Range("J:M").ClearContents

Range("J:M").ClearFormats

'creating required headers

Range("J1").Value = "Ticker Stock Name"

Range("K1").Value = "Yearly Price Change"

Range("L1").Value = "Percentage Change"

Range("M1").Value = "Volume"

Columns("J:M").AutoFit

'Step 3: iterating through each row of the data of each sheet

last\_row = Range("A1").End(xlDown).Row 'getting the last row from the current activated sheet.

For r = 2 To last\_row

'checking if the ticker value is the same in the next row or not

If Range("A" & r).Value = Range("A" & r + 1).Value Then

vol = Range("G" & r).Value + vol 'getting the cumulative sum of volume

Else 'calculating values needed

start\_price = Range("C" & new\_ticker\_start\_row\_number).Value

close\_price = Range("F" & r).Value

price\_change = close\_price - start\_price

If start\_price = 0 Then

pct\_price\_change = 0

Else

pct\_price\_change = (close\_price - start\_price) / start\_price

End If

ticker = Range("A" & r).Value

vol = Range("G" & r).Value + vol

'changing new ticker start position

new\_ticker\_start\_row\_number = r + 1

'adding all the required calculated values to the sheet

start\_row = Range("J100000").End(xlUp).Row + 1

Range("J" & start\_row).Value = ticker

Range("K" & start\_row).Value = price\_change

Range("L" & start\_row).Value = pct\_price\_change

'converting decimal value to percentage

Range("L" & start\_row).Value = Format(Range("L" & start\_row).Value, "#.##%")

Range("M" & start\_row).Value = vol

're-initializing variable vol to 0 so that we can get the cumulative sum for new ticker

vol = 0

'conditional formatting based on price change value

If Range("K" & start\_row).Value < 0 Then

Range("K" & start\_row).Interior.Color = RGB(255, 0, 0)

Else:

Range("K" & start\_row).Interior.Color = RGB(169, 208, 142)

End If

End If

Next r

'bonus part

'clear old contents

Range("O:Q").ClearContents

Range("O:Q").ClearFormats

'giving headers

Range("O2").Value = "Greatest % Increase"

Range("O3").Value = "Greatest % Decrease"

Range("O4").Value = "Greatest Total Volume"

Range("P1").Value = "Ticker"

Range("Q1").Value = "Value"

'using formulas to get the values of greatest % increase and decrease and also greatest volume

max\_value\_pct = Application.WorksheetFunction.Max(Range("L2:L" & start\_row + 1))

min\_value\_pct = Application.WorksheetFunction.Min(Range("L2:L" & start\_row))

max\_value\_vol = Application.WorksheetFunction.Max(Range("M2:M" & start\_row + 1))

'getting the corresponding ticket based on greatest values

max\_pct\_ticker = Application.WorksheetFunction.Index(Range("J2:J" & start\_row + 1), Application.WorksheetFunction.Match(max\_value\_pct, Range("L2:L" & start\_row + 1), 0))

min\_pct\_ticker = Application.WorksheetFunction.Index(Range("J2:J" & start\_row + 1), Application.WorksheetFunction.Match(min\_value\_pct, Range("L2:L" & start\_row + 1), 0))

max\_vol\_ticker = Application.WorksheetFunction.Index(Range("J2:J" & start\_row + 1), Application.WorksheetFunction.Match(max\_value\_vol, Range("M2:M" & start\_row + 1), 0))

'copying the values in the respective cells

Range("P2").Value = max\_pct\_ticker

Range("P3").Value = min\_pct\_ticker

Range("P4").Value = max\_vol\_ticker

Range("Q2").Value = Format(max\_value\_pct, "#.####%")

Range("Q3").Value = Format(min\_value\_pct, "#.####%")

Range("Q4").Value = max\_value\_vol

Columns("O:Q").AutoFit

Columns("J:M").AutoFit

opt = MsgBox("Tab: " & sheet\_name & " is completed. Do you want to continue to next tab?", vbYesNo + vbQuestion, "Continue Yes/No")

If opt = vbNo Then

GoTo exit\_macro

End If

new\_ticker\_start\_row\_number = 2

Next sh

exit\_macro:

MsgBox ("Marco run is completed!")

End Sub