Objective:

The objective is to analyse yearly stock data with the VBA script. The worksheets hold the data for three years with the different ticker value. The VBA script will give the increase and decrease in stock value for each year, the percentage change, and the total volume for the year. Also, the stock will give the greatest increase, decrease, and the total volume.

* Extract Ticker Symbols, Initial and Final Values, Calculate Yearly Change (Yearly Change = Final Value - Initial (non-zero)), Percentage Change, Total Volume, Determine Max and Min values, Greatest % Increase, Greatest % Decrease.
* Provide conditional formatting that will highlight positive change in green and negative change in red.
* VBA script run once and produces all adjustments on all worksheet.

Sub WorksheetsLoops()

' Set object variables in the current worksheet.

Dim CurrentWs As Worksheet

Dim Summary\_Table\_Header As Boolean

Dim COMMAND\_SPREADSHEET As Boolean

Summary\_Table\_Header = True

COMMAND\_SPREADSHEET = True

' Loop through all the worksheets.

For Each CurrentWs In Worksheets

' Initial variable for holding the ticker name

Dim Ticker\_Name As String

Ticker\_Name = " "

' Initial variable for holding the total per ticker name

Dim Total\_Ticker\_Volume As Double

Total\_Ticker\_Volume = 0

' Set new variables

Dim Open\_Price As Double

Open\_Price = 0

Dim Close\_Price As Double

Close\_Price = 0

Dim Delta\_Price As Double

Delta\_Price = 0

Dim Delta\_Percent As Double

Delta\_Percent = 0

Dim MAX\_TICKER\_NAME As String

MAX\_TICKER\_NAME = " "

Dim MIN\_TICKER\_NAME As String

MIN\_TICKER\_NAME = " "

Dim MAX\_PERCENT As Double

MAX\_PERCENT = 0

Dim MIN\_PERCENT As Double

MIN\_PERCENT = 0

Dim MAX\_VOLUME\_TICKER As String

MAX\_VOLUME\_TICKER = " "

Dim MAX\_VOLUME As Double

MAX\_VOLUME = 0

' For the summary table

Dim Summary\_Table\_Row As Long

Summary\_Table\_Row = 2

' Initial row count

Dim Lastrow As Long

Dim i As Long

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

' Titles for the Summary Table

CurrentWs.Range("I1").Value = "Ticker"

CurrentWs.Range("J1").Value = "Yearly Change"

CurrentWs.Range("K1").Value = "Percent Change"

CurrentWs.Range("L1").Value = "Total Stock Volume"

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

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

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

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

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

' Initial value of Open Price and within the for loop

Open\_Price = CurrentWs.Cells(2, 3).Value

' Loop

For i = 2 To Lastrow

' Checking if we are not within the same ticker, write results to summary table

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

' Set ticker name

Ticker\_Name = CurrentWs.Cells(i, 1).Value

' Delta\_Price and Delta\_Percent

Close\_Price = CurrentWs.Cells(i, 6).Value

Delta\_Price = Close\_Price - Open\_Price

' Division by 0 condition

If Open\_Price <> 0 Then

Delta\_Percent = (Delta\_Price / Open\_Price) \* 100

Else

MsgBox ("For " & Ticker\_Name & ", Row " & CStr(i) & ": Open Price =" & Open\_Price & ". Fix <open> field manually and save the spreadsheet.")

End If

' Add total volume

Total\_Ticker\_Volume = Total\_Ticker\_Volume + CurrentWs.Cells(i, 7).Value

' Ticker Name in Column I

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

' Ticker Name in Column J

CurrentWs.Range("J" & Summary\_Table\_Row).Value = Delta\_Price

' Fill Yearly Change with Green and Red colors

If (Delta\_Price > 0) Then

'column with GREEN color are positive

CurrentWs.Range("J" & Summary\_Table\_Row).Interior.ColorIndex = 4

ElseIf (Delta\_Price <= 0) Then

'column with RED color are with negative value

CurrentWs.Range("J" & Summary\_Table\_Row).Interior.ColorIndex = 3

End If

' Print the Ticker name

CurrentWs.Range("K" & Summary\_Table\_Row).Value = (CStr(Delta\_Percent) & "%")

' Print the Ticker Name

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

' Add 1 to the summary table row count

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

' Reset Delta\_price

Delta\_Price = 0

'Set Close Price

Close\_Price = 0

' Tickers Open Price

Open\_Price = CurrentWs.Cells(i + 1, 3).Value

' To Populate final Summary table

If (Delta\_Percent > MAX\_PERCENT) Then

MAX\_PERCENT = Delta\_Percent

MAX\_TICKER\_NAME = Ticker\_Name

ElseIf (Delta\_Percent < MIN\_PERCENT) Then

MIN\_PERCENT = Delta\_Percent

MIN\_TICKER\_NAME = Ticker\_Name

End If

If (Total\_Ticker\_Volume > MAX\_VOLUME) Then

MAX\_VOLUME = Total\_Ticker\_Volume

MAX\_VOLUME\_TICKER = Ticker\_Name

End If

' Assigning the value to delta percent,and total ticker volume

Delta\_Percent = 0

Total\_Ticker\_Volume = 0

Else

' Encrease Total Ticker Volume

Total\_Ticker\_Volume = Total\_Ticker\_Volume + CurrentWs.Cells(i, 7).Value

End If

Next i

' For final result

CurrentWs.Range("Q2").Value = (CStr(MAX\_PERCENT) & "%")

CurrentWs.Range("Q3").Value = (CStr(MIN\_PERCENT) & "%")

CurrentWs.Range("P2").Value = MAX\_TICKER\_NAME

CurrentWs.Range("P3").Value = MIN\_TICKER\_NAME

CurrentWs.Range("Q4").Value = MAX\_VOLUME

CurrentWs.Range("P4").Value = MAX\_VOLUME\_TICKER

Next CurrentWs

End Sub