Sub stockAnalysis()

' Set CurrentWs as a worksheet object variable.

Dim CurrentWs As Worksheet

Dim Need\_Summary\_Table\_Header As Boolean

Dim COMMAND\_SPREADSHEET As Boolean

Need\_Summary\_Table\_Header = False ' 'Set Header flag

COMMAND\_SPREADSHEET = True 'Hard part flag

' Loop through all of the worksheets in the active workbook.

For Each CurrentWs In Worksheets

' Set initial variable for holding the ticker name

Dim Ticker\_Name As String

Ticker\_Name = " "

' Set an initial variable for holding the total per ticker name

Dim Total\_Ticker\_Volume As Double

Total\_Ticker\_Volume = 0

' Set new variables for Moderate Solution Part

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

' Set new variables for Hard Solution Part

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

'----------------------------------------------------------------

' Keep track of the location for each ticker name

' in the summary table for the current worksheet

Dim Summary\_Table\_Row As Long

Summary\_Table\_Row = 2

' Set initial row count for the current worksheet

Dim Lastrow As Long

Dim i As Long

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

' For all worksheet except the first one, the Results

If Need\_Summary\_Table\_Header Then

' Set Titles for the Summary Table for current worksheet

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

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

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

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

' Set Additional Titles for new Summary Table on the right for current worksheet

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"

Else

'This is the first, resulting worksheet, reset flag for the rest of worksheets

Need\_Summary\_Table\_Header = True

End If

' Set initial value of Open Price for the first Ticker of CurrentWs,

' The rest ticker's open price will be initialized within the for loop below

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

' Loop from the beginning of the current worksheet(Row2) till its last row

For i = 2 To Lastrow

' Check if we are still within the same ticker name,

' if not - write results to summary table

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

' Set the ticker name, we are ready to insert this ticker name data

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

' Calculate Delta\_Price and Delta\_Percent

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

Delta\_Price = Close\_Price - Open\_Price

' Check Division by 0 condition

If Open\_Price <> 0 Then

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

Else

' Unlikely, but it needs to be checked to avoid program crushing

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

End If

' Add to the Ticker name total volume

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

' Print the Ticker Name in the Summary Table, Column I

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

' print the Ticker Name in the Summary Table, Column I

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

' Fill "Yearly Change", i.e. Delta\_Price with Green and Red colors

If (Delta\_Price > 0) Then

'Fill column with GREEN color - good

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

ElseIf (Delta\_Price <= 0) Then

'Fill column with RED color - bad

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

End If

' Print the Ticker Name in the Summary Table, Column I

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

' Print the Ticker Name in the Summary Table, Column J

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\_rice and Delta\_Percent holders, as we will be working with new Ticker

Delta\_Price = 0

' Hard part,do this in the beginning of the for loop Delta\_Percent = 0

Close\_Price = 0

' Capture next Ticker's Open\_Price

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

' Hard part : Populate new Summary table on the right for the current spreadsheet HERE

' Keep track of all extra hard counters and do calculations within the current spreadsheet

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

' Hard part adjustments to resetting counters

Delta\_Percent = 0

Total\_Ticker\_Volume = 0

'Else - If the cell immediately following a row is still the same ticker name,

'just add to Totl Ticker Volume

Else

' Encrease the Total Ticker Volume

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

End If

' For debugging MsgBox (CurrentWs.Rows(i).Cells(2, 1))

Next i

' For hard solution part:

' Check if it is not the first spreadsheet

' Record all new counts to the new summary table on the right of the current spreadsheet

If Not COMMAND\_SPREADSHEET Then

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

Else

COMMAND\_SPREADSHEET = False

End If

Next CurrentWs

End Sub