Sub stockAnalysis()

'Loop through all worksheets

For Each ws In Worksheets

'Set initial variables

Dim ticker As String

Dim openingPrice As Double

Dim closingPrice As Double

Dim yearlyChange As Double

Dim percentChange As Double

Dim totalVolume As Double

Dim lastRow As Long

Dim i As Long

Dim j As Long

'Set column headers

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

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

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

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

'Set initial row for output data

j = 2

'Find last row of data

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

'Loop through all rows of data

For i = 2 To lastRow

'Check if current ticker is different from previous ticker

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

'Get ticker symbol

ticker = ws.Cells(i, 1).Value

'Get opening price

openingPrice = ws.Cells(i, 3).Value

'Reset total volume

totalVolume = 0

End If

'Add to total volume

totalVolume = totalVolume + ws.Cells(i, 7).Value

'Check if current ticker is different from next ticker

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

'Get closing price

closingPrice = ws.Cells(i, 6).Value

'Calculate yearly change and percent change

yearlyChange = closingPrice - openingPrice

percentChange = yearlyChange / openingPrice

'Output data to worksheet

ws.Range("I" & j).Value = ticker

ws.Range("J" & j).Value = yearlyChange

ws.Range("J" & j).NumberFormat = "#,##0.00"

ws.Range("K" & j).Value = percentChange

ws.Range("K" & j).NumberFormat = "0.00%"

ws.Range("L" & j).Value = totalVolume

'Set conditional formatting

If yearlyChange > 0 Then

ws.Range("J" & j).Interior.ColorIndex = 4 'Green

ElseIf yearlyChange < 0 Then

ws.Range("J" & j).Interior.ColorIndex = 3 'Red

End If

'Move to next row

j = j + 1

End If

Next i

'Find last row of output data

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

'Set initial variables for greatest values

Dim greatestIncrease As Double

Dim greatestDecrease As Double

Dim greatestVolume As Double

Dim greatestIncreaseTicker As String

Dim greatestDecreaseTicker As String

Dim greatestVolumeTicker As String

'Set initial values for greatest values

greatestIncrease = 0

greatestDecrease = 0

greatestVolume = 0

greatestIncreaseTicker = ""

greatestDecreaseTicker = ""

greatestVolumeTicker = ""

'Loop through output

' Find the stock with the greatest percent increase, greatest percent decrease, and greatest total volume

Dim maxPercentIncreaseTicker As String

Dim maxPercentDecreaseTicker As String

Dim maxVolumeTicker As String

Dim maxPercentIncrease As Double

Dim maxPercentDecrease As Double

Dim maxVolume As Double

maxPercentIncrease = 0

maxPercentDecrease = 0

maxVolume = 0

For i = 2 To lastRow

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

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

maxPercentIncreaseTicker = ws.Cells(i, 9).Value

End If

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

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

maxPercentDecreaseTicker = ws.Cells(i, 9).Value

End If

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

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

maxVolumeTicker = ws.Cells(i, 9).Value

End If

Next i

' Output the results

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

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

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

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

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

ws.Range("P2").Value = maxPercentIncreaseTicker

ws.Range("Q2").Value = FormatPercent(maxPercentIncrease, 2)

ws.Range("P3").Value = maxPercentDecreaseTicker

ws.Range("Q3").Value = FormatPercent(maxPercentDecrease, 2)

ws.Range("P4").Value = maxVolumeTicker

ws.Range("Q4").Value = maxVolume

Next ws

End Sub