Sub StockAnalysis()

Dim ws As Worksheet

Dim LastRow As Long

Dim Ticker As String

Dim OpenPrice As Double

Dim ClosePrice As Double

Dim YearlyChange As Double

Dim PercentChange As Double

Dim TotalVolume As Double

Dim SummaryRow As Long

' Loop through each worksheet in the workbook

For Each ws In ThisWorkbook.Worksheets

' Initialize summary row

SummaryRow = 2

' Add headers for the new columns

ws.Cells(1, 9).Value = "Ticker"

ws.Cells(1, 10).Value = "Yearly Change"

ws.Cells(1, 11).Value = "Percent Change"

ws.Cells(1, 12).Value = "Total Stock Volume"

' Find the last row with data in the worksheet

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

' Initialize variables

OpenPrice = ws.Cells(2, 3).Value ' Initial open price

' Loop through rows in the worksheet to calculate and display information

For i = 2 To LastRow

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

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

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

YearlyChange = ClosePrice - OpenPrice

' Check for division by zero before calculating percent change

If OpenPrice <> 0 Then

PercentChange = YearlyChange / OpenPrice

Else

PercentChange = 0

End If

' Display data in the summary columns

ws.Cells(SummaryRow, 9).Value = Ticker

ws.Cells(SummaryRow, 10).Value = YearlyChange

ws.Cells(SummaryRow, 11).Value = PercentChange

ws.Cells(SummaryRow, 12).Value = TotalVolume

' Apply conditional formatting for Yearly Change (green for positive, red for negative)

If YearlyChange > 0 Then

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

ElseIf YearlyChange < 0 Then

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

End If

' Move to the next summary row

SummaryRow = SummaryRow + 1

' Update the OpenPrice for the next ticker

OpenPrice = ws.Cells(i + 1, 3).Value

TotalVolume = 0 ' Reset TotalVolume for the next ticker

Next i

' Find and display the "Greatest % Increase," "Greatest % Decrease," and "Greatest Total Volume"

ws.Cells(2, 16).Value = "Greatest % Increase"

ws.Cells(3, 16).Value = "Greatest % Decrease"

ws.Cells(4, 16).Value = "Greatest Total Volume"

ws.Cells(2, 17).Value = WorksheetFunction.Max(ws.Range("K:K"))

ws.Cells(3, 17).Value = WorksheetFunction.Min(ws.Range("K:K"))

ws.Cells(4, 17).Value = WorksheetFunction.Max(ws.Range("L:L"))

' Add the "Ticker Symbol" column between columns P and Q

ws.Cells(1, 17).EntireColumn.Insert

ws.Cells(1, 17).Value = "Ticker Symbol"

ws.Cells(2, 17).Resize(LastRow - 1, 1).Value = ws.Cells(2, 1).Resize(LastRow - 1, 1).Value

' Apply conditional formatting for Percent Change (green for positive, red for negative)

ws.Cells(2, 17).NumberFormat = "0.00%"

ws.Cells(3, 17).NumberFormat = "0.00%"

ws.Cells(2, 17).Font.Color = RGB(0, 255, 0) ' Green

ws.Cells(3, 17).Font.Color = RGB(255, 0, 0) ' Red

Next ws

End Sub