Sub StockAnalysis()

' Declare variables

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 PercentageChange As Double

Dim TotalVolume As Double

Dim SummaryRow As Long

Dim MaxPercentIncrease As Double

Dim MaxPercentDecrease As Double

Dim MaxTotalVolume As Double

Dim MaxPercentIncreaseTicker As String

Dim MaxPercentDecreaseTicker As String

Dim MaxTotalVolumeTicker As String

' Loop through each worksheet

For Each ws In Worksheets

ws.Activate

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

SummaryRow = 2

MaxPercentIncrease = 0

MaxPercentDecrease = 0

MaxTotalVolume = 0

' Initialize summary table headers

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

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

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

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

' Loop through each row in the worksheet

For i = 2 To LastRow

' Get Ticker symbol

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

' Get Close Price

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

' If the Ticker symbol is different from the one in the previous row, calculate and display results

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

If OpenPrice <> 0 Then

' Calculate Yearly Change, Percentage Change, and Total Stock Volume

YearlyChange = ClosePrice - OpenPrice

PercentageChange = YearlyChange / OpenPrice

TotalVolume = Application.WorksheetFunction.SumIf(ws.Range("A:A"), Ticker, ws.Range("G:G"))

' Display results in the summary table

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

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

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

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

' Highlight positive change in green and negative change in red

If YearlyChange > 0 Then

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

ElseIf YearlyChange < 0 Then

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

End If

' Find the stock with the "Greatest % increase", "Greatest % decrease", and "Greatest total volume"

If PercentageChange > MaxPercentIncrease Then

MaxPercentIncrease = PercentageChange

MaxPercentIncreaseTicker = Ticker

End If

If PercentageChange < MaxPercentDecrease Then

MaxPercentDecrease = PercentageChange

MaxPercentDecreaseTicker = Ticker

End If

If TotalVolume > MaxTotalVolume Then

MaxTotalVolume = TotalVolume

MaxTotalVolumeTicker = Ticker

End If

' Move to the next row in the summary table

SummaryRow = SummaryRow + 1

End If

' Reset Open Price for the new Ticker

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

End If

Next i

' Display "Greatest % increase", "Greatest % decrease", and "Greatest total volume"

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

ws.Cells(2, 17).Value = MaxPercentIncreaseTicker

ws.Cells(2, 18).Value = MaxPercentIncrease

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

ws.Cells(3, 17).Value = MaxPercentDecreaseTicker

ws.Cells(3, 18).Value = MaxPercentDecrease

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

ws.Cells(4, 17).Value = MaxTotalVolumeTicker

ws.Cells(4, 18).Value = MaxTotalVolume

Next ws

End Sub