Sub StockAnalysis()

Dim ws As Worksheet

Dim LastRow As Long

Dim Ticker As String

Dim YearlyOpenPrice As Double

Dim YearlyClosePrice As Double

Dim YearlyChange As Double

Dim YearlyChangePercent As Double

Dim TotalVolume As Double

Dim Row As Long

Dim SummaryRow As Long

' Loop through all worksheets (years)

For Each ws In ThisWorkbook.Worksheets

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

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

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

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

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

Row = 2

SummaryRow = 2

' Initialize variables for the first row

Ticker = ws.Cells(2, 1).Value

YearlyOpenPrice = ws.Cells(2, 3).Value

TotalVolume = 0

For Row = 2 To LastRow

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

' Calculate YearlyClosePrice when the ticker changes

YearlyClosePrice = ws.Cells(Row, 6).Value

' Calculate YearlyChange and YearlyChangePercent

YearlyChange = YearlyClosePrice - YearlyOpenPrice

YearlyChangePercent = (YearlyChange / YearlyOpenPrice) \* 100

' Output the results

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

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

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

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

' Color code YearlyChange

If YearlyChange >= 0 Then

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

Else

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

End If

' Reset variables for the next ticker

SummaryRow = SummaryRow + 1

Ticker = ws.Cells(Row + 1, 1).Value

YearlyOpenPrice = ws.Cells(Row + 1, 3).Value

TotalVolume = 0

Else

' Accumulate total volume for the same ticker

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

End If

Next Row

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

Dim MaxIncrease As Double

Dim MaxDecrease As Double

Dim MaxVolume As Double

Dim MaxIncreaseTicker As String

Dim MaxDecreaseTicker As String

Dim MaxVolumeTicker As String

MaxIncrease = 0

MaxDecrease = 0

MaxVolume = 0

For Row = 2 To SummaryRow - 1

If ws.Cells(Row, 11).Value > MaxIncrease Then

MaxIncrease = ws.Cells(Row, 11).Value

MaxIncreaseTicker = ws.Cells(Row, 9).Value

End If

If ws.Cells(Row, 11).Value < MaxDecrease Then

MaxDecrease = ws.Cells(Row, 11).Value

MaxDecreaseTicker = ws.Cells(Row, 9).Value

End If

If ws.Cells(Row, 12).Value > MaxVolume Then

MaxVolume = ws.Cells(Row, 12).Value

MaxVolumeTicker = ws.Cells(Row, 9).Value

End If

Next Row

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

ws.Cells(2, 15).Value = "Greatest % Increase"

ws.Cells(3, 15).Value = "Greatest % Decrease"

ws.Cells(4, 15).Value = "Greatest Total Volume"

ws.Cells(2, 16).Value = MaxIncreaseTicker

ws.Cells(3, 16).Value = MaxDecreaseTicker

ws.Cells(4, 16).Value = MaxVolumeTicker

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

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

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

Next ws

End Sub