Sub StockAnalysis()

Dim Ticker As String

Dim lastrow As Double

Dim TotalStockVolume As Double

Dim NextTicker As String

Dim RowCount As Double

Dim OpenValue As Double

Dim CloseValue As Double

Dim YearlyChange As Double

Dim PercentChange As Double

Dim ws As Worksheet

Dim GreatestIncrease As Double

Dim GITicker As String

Dim GreatestDecrease As Double

Dim GDTicker As String

Dim GIVolume As Double

Dim GDVolume As Double

Dim GreatestVolume As Double

Dim J As Integer

Dim i As Double

'Creates Loop through all Worksheets

For Each ws In Worksheets

'Starts Row counter in the ticker column

RowCount = 2

'Sets Total Stock Volume to start at 0

TotalStockVolume = 0

'Sets open value to the first known open value

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

'Create Headers for Summary Table

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

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

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

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

'Create Headers for Additional Functionality

ws.Cells(1, 16) = "Ticker"

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

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

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

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

' calculates the lastrow for the i conditional

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

For i = 2 To lastrow

'Sets the first ticker value

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

'Sets the next ticker value

NextTicker = ws.Cells(i + 1, 1).Value

'If the ticker values are equal in each row then

If Ticker = NextTicker Then

'The total stock volume will be added for each row where the ticker values are equal

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

Else

'Where the ticker values are not equal, the CloseValue will be captured to calculate YearlyChange and PercentChange.

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

YearlyChange = CloseValue - OpenValue

PercentChange = YearlyChange / OpenValue

'Those values will be inserted at these (row, column) locations

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

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

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

ws.Cells(RowCount, 12).Value = TotalStockVolume

'Conditional formatting to change negative numbers to red, positive numbers to green

If YearlyChange < 0 Then

ws.Cells(RowCount, 10).Interior.ColorIndex = 3

Else

ws.Cells(RowCount, 10).Interior.ColorIndex = 4

End If

'Conditional formatting to change percent change to a percentage

ws.Cells(RowCount, 11).NumberFormat = "0.00%"

'The values of total stock volume, open value and rowcount will be reset for the next iteration

TotalStockVolume = 0

OpenValue = ws.Cells(i + 1, 3)

RowCount = RowCount + 1

End If

Next i

'Set variables to calculate additional functionality

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

GreatestIncrease = ws.Cells(2, 11).Value

GITicker = ws.Cells(2, 9).Value

GreatestDecrease = ws.Cells(2, 11).Value

GDTicker = ws.Cells(2, 9).Value

GIPercent = ws.Cells(2, 11).Value

GDPercent = ws.Cells(2, 11).Value

GreatestVolume = ws.Cells(2, 12).Value

'Calculates the last row for the new i conditional

For i = 2 To lastrow

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

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

'Loop to find Greatest Increase and correlating ticker

If YearlyChange > GreatestIncrease Then

GreatestIncrease = YearlyChange

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

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

'Assign Value to Cell

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

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

End If

'Loop to find Greatest Decrease and correlating ticker

If YearlyChange < GreatestDecrease Then

GreatestDecrease = YearlyChange

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

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

'Assign Value to Cell

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

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

End If

'Loop to calculate greatest volumne overall

If YearlyVolume > GreatestVolume Then

GreatestVolume = YearlyVolume

'Assign Value to Cell

ws.Cells(4, 16).Value = ws.Cells(i, 9).Value

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

End If

Next i

Next ws

End Sub