Sub ChallengeVBA():

'Declare variables

Dim Ticker As String

Dim year\_open As Double

Dim year\_close As Double

Dim Yearly\_Change As Double

Dim Total\_Stock\_Volume As Double

Dim Percent\_Change As Double

'start

‘Dim start\_data As Integer

'loop to start

start\_data = 2

previous\_i = 1

Total\_Stock\_Volume = 0

'Declare worksheet and variable locations

Dim ws As Worksheet

For Each ws In Worksheets

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

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

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

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

'loop end is last row of column A - for loop

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

'For each Ticker work out the yearly change, percent change and total volume

For i = 2 To LastRow

'Tickersymbol must match

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

'locate Ticker

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

'Move to the next Ticker

previous\_i = previous\_i + 1

'Work out the open price and the end price

year\_open = ws.Cells(previous\_i, 3).Value

year\_close = ws.Cells(i, 6).Value

'Sum total volume using a loop

For j = previous\_i To i

Total\_Stock\_Volume = Total\_Stock\_Volume + ws.Cells(j, 7).Value

Next j

'If 0

If year\_open = 0 Then

Percent\_Change = year\_close

Else

Yearly\_Change = year\_close - year\_open

Percent\_Change = Yearly\_Change / year\_open

End If

'Ticker, year change and percent change table

ws.Cells(start\_data, 9).Value = Ticker

ws.Cells(start\_data, 10).Value = Yearly\_Change

ws.Cells(start\_data, 11).Value = Percent\_Change

'Format column K/11 and L/12

ws.Cells(start\_data, 11).NumberFormat = "0.00%"

ws.Cells(start\_data, 12).Value = Total\_Stock\_Volume

start\_data = start\_data + 1

'Reset

Total\_Stock\_Volume = 0

Yearly\_Change = 0

Percent\_Change = 0

previous\_i = i

End If

Next i

'last row of column k

kEndRow = ws.Cells(Rows.Count, "K").End(xlUp).Row

'Define start

Increase = 0

Decrease = 0

Greatest = 0

'find max/min for percentage change and the max volume Loop

For k = 3 To kEndRow

'Define previous increment to check

last\_k = k - 1

'Define current row for percentage

current\_k = ws.Cells(k, 11).Value

'Define Previous row for percentage

prevous\_k = ws.Cells(last\_k, 11).Value

'greatest total volume row

volume = ws.Cells(k, 12).Value

'Prevous greatest volume row

prevous\_vol = ws.Cells(last\_k, 12).Value

'Find the increase

If Increase > current\_k And Increase > prevous\_k Then

Increase = Increase

'define name for increase percentage

'increase\_name = ws.Cells(k, 9).Value

ElseIf current\_k > Increase And current\_k > prevous\_k Then

Increase = current\_k

'define name for increase percentage

increase\_name = ws.Cells(k, 9).Value

ElseIf prevous\_k > Increase And prevous\_k > current\_k Then

Increase = prevous\_k

'define name for increase percentage

increase\_name = ws.Cells(last\_k, 9).Value

End If

'Find the decrease

If Decrease < current\_k And Decrease < prevous\_k Then

'Define decrease as decrease

Decrease = Decrease

'Define name for increase percentage

ElseIf current\_k < Increase And current\_k < prevous\_k Then

Decrease = current\_k

decrease\_name = ws.Cells(k, 9).Value

ElseIf prevous\_k < Increase And prevous\_k < current\_k Then

Decrease = prevous\_k

decrease\_name = ws.Cells(last\_k, 9).Value

End If

'Find the greatest volume

If Greatest > volume And Greatest > prevous\_vol Then

Greatest = Greatest

'define name for greatest volume

'greatest\_name = ws.Cells(k, 9).Value

ElseIf volume > Greatest And volume > prevous\_vol Then

Greatest = volume

'define name for greatest volume

greatest\_name = ws.Cells(k, 9).Value

ElseIf prevous\_vol > Greatest And prevous\_vol > volume Then

Greatest = prevous\_vol

'define name for greatest volume

greatest\_name = ws.Cells(last\_k, 9).Value

End If

Next k

'Table column names

ws.Range("O1").Value = "Column Name"

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

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

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

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

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

'not sure about getting values but they will need to be formatted as a %

'Format colours for column J

jEndRow = ws.Cells(Rows.Count, "J").End(xlUp).Row

For j = 2 To jEndRow

'if greater than or less than zero

If ws.Cells(j, 10) > 0 Then

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

Else

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

End If

Next j

'Excute to next worksheet

Next ws

End Sub