Sub Main()

'Loop through spreadsheets and output unique ticker symbols in

'Ticker column (starting in spreadsheet A, cell I2)

'Need to reference last row with data

'Specify last row by sheet

For Each ws In ThisWorkbook.Worksheets

'Set headers for basic assignment

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

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

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

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

'set headers/columns for challenge

ws.Range("N2").Value = "Greatest % Increase"

ws.Range("N3").Value = "Greatest % Decrease"

ws.Range("N4").Value = "Greatest Total Volume"

ws.Range("O1").Value = "Ticker"

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

'Create variables

Dim tickerColumn As Integer

tickerColumn = 1

Dim tickerDateCol As Integer

tickerDateCol = 2

Dim tickerOpenCol As Integer

tickerOpenCol = 3

Dim tickerCloseCol As Integer

tickerCloseCol = 6

Dim uniqueTickerCol As Integer

uniqueTickerCol = 9

Dim tickerYrPerChangeCol As Integer

tickerYrPerChangeCol = 11

Dim totalStockVolCol As Integer

totalStockVolCol = 12

Dim tickerName As String

Dim tickerVolume As Double

Dim summaryRow As Integer

summaryRow = 2

Dim tickerOpen As Double

tickerOpen = 0

Dim tickerClose As Double

tickerClose = 0

Dim yearlyChange As Double

yearlyChange = 0

Dim percentChange As Double

percentChange = 0

Dim maxPercentChange As Double

Dim minPercentChange As Double

Dim maxVolume As Double

tickerOpen = ws.Cells(2, tickerOpenCol).Value

For i = 2 To ws.Cells.SpecialCells(xlCellTypeLastCell).Row

'find unique ticker symbols

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

'store the ticker symbol

tickerName = ws.Cells(i, tickerColumn).Value

'store the close price

tickerClose = ws.Cells(i, tickerCloseCol).Value

'store the yearly change

yearlyChange = tickerClose - tickerOpen

'store the percent change

If tickerOpen <> 0 Then

percentChange = (yearlyChange / tickerOpen)

End If

'store the total stock volume

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

'write the ticker symbol and total stock volume row

ws.Range("I" & summaryRow).Value = tickerName

ws.Range("J" & summaryRow).Value = yearlyChange

ws.Range("K" & summaryRow).Value = percentChange

ws.Range("L" & summaryRow).Value = tickerVolume

'format yearly change positive = green, negative = red

If (yearlyChange < 0) Then

ws.Range("J" & summaryRow).Interior.ColorIndex = 3

ElseIf (yearlyChange > 0) Then

ws.Range("J" & summaryRow).Interior.ColorIndex = 4

End If

'because we are seeing the next ticker change, reset values

yearlyChange = 0

percentChange = 0

tickerVolume = 0

tickerOpen = ws.Cells(i + 1, tickerOpenCol).Value

summaryRow = summaryRow + 1

Else

'we are in the same symbol, so add the value

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

End If

Next i

'Find max percent change

maxPercentChange = WorksheetFunction.Max(ws.Range("K:K"))

'Write max percent change

ws.Range("P2").Value = maxPercentChange

'Check max percent change

'maxPercentChangeRow = WorksheetFunction.Match(maxPercentChange, ws.Range("K:K"), 0)

'ws.Range("Q2").Value = maxPercentChangeRow

'Find min percent change

minPercentChange = WorksheetFunction.Min(ws.Range("K:K"))

'Write min percent change

ws.Range("P3").Value = minPercentChange

'Check min percent change

'minPercentChangeRow = WorksheetFunction.Match(minPercentChange, ws.Range("K:K"), 0)

'ws.Range("Q3").Value = minPercentChangeRow

'Find max volume

maxVolume = WorksheetFunction.Max(ws.Range("L:L"))

'Write max volume

ws.Range("P4").Value = maxVolume

'Check max volume

'maxVolumeRow = WorksheetFunction.Match(maxVolume, ws.Range("L:L"), 0)

'ws.Range("Q4").Value = maxVolumeRow

'Find challenge ticker symbols

tickerName = ""

For j = 2 To ws.Cells.SpecialCells(xlCellTypeLastCell).Row

If ws.Cells(j, tickerYrPerChangeCol).Value = maxPercentChange Then

tickerName = ws.Cells(j, uniqueTickerCol).Value

'Write max percent change ticker symbol

ws.Cells(2, 15).Value = ws.Cells(j, uniqueTickerCol).Value

ElseIf ws.Cells(j, tickerYrPerChangeCol).Value = minPercentChange Then

tickerName = ws.Cells(j, uniqueTickerCol).Value

'Write min percent change ticker symbol

ws.Cells(3, 15).Value = ws.Cells(j, uniqueTickerCol).Value

ElseIf ws.Cells(j, totalStockVolCol).Value = maxVolume Then

tickerName = ws.Cells(j, uniqueTickerCol).Value

'Write max volume ticker symbol

ws.Cells(4, 15).Value = tickerName

End If

Next j

'format data

ws.Range("K:K").NumberFormat = "0.00%"

ws.Range("L:L").NumberFormat = "#,###"

ws.Range("P2").NumberFormat = "0.00%"

ws.Range("P3").NumberFormat = "0.00%"

ws.Range("P4").NumberFormat = "#,###"

Next ws

End Sub