Sub Stk\_Mkt\_Analysis()

'create a loop to go through all worksheets in the workbook for yearly stock market data

'challenge to add additional yearly analysis

'first variable for the worksheets

Dim ws As Worksheet

'Start looping through the worksheets

For Each ws In Worksheets

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

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

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

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

'second set of variables for columns 1 to 6

Dim ticker As String

Dim volume As Double

volume = 0

Dim rowcount As Long

rowcount = 2

Dim year\_close As Double

year\_close = 0

Dim year\_change As Double

year\_change = 0

Dim lastrow As Long

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

For i = 2 To lastrow

'first conditional statment

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

Year\_open = ws.Cells(i, 3).Value

End If

volume = volume + ws.Cells(i, 7)

'second conditional statement

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

ws.Cells(rowcount, 9).Value = ws.Cells(i, 1).Value

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

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

year\_change = year\_close - Year\_open

ws.Cells(rowcount, 10).Value = year\_change

If year\_change >= 0 Then

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

Else

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

End If

'third conditional statement for the percentages

If Year\_open = 0 And year\_close = 0 Then

Percent\_change = 0

ws.Cells(rowcount, 11).Value = Percent\_change

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

ElseIf Year\_open = 0 Then

Dim percent\_change\_new As String

percent\_change\_new = "New Stock"

ws.Cells(rowcount, 11) = Percent\_change

Else

Percent\_change = year\_change / Year\_open

ws.Cells(rowcount, 11).Value = Percent\_change

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

End If

'add one to the rowcount then move to the next empty row

rowcount = rowcount + 1

'reset factors being analyized

volume = 0

Year\_open = 0

year\_close = 0

year\_change = 0

Percent\_change = 0

End If

Next i

'final challenge request for yearly analysis

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

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

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

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

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

'Adding challenge variables to yearly analysis

Dim best\_stk As String

Dim best\_value As Double

best\_value = ws.Cells(2, 11).Value

Dim wrst\_stk As String

Dim wrst\_value As Double

wrst\_value = ws.Cells(2, 11).Value

Dim highest\_stk As String

Dim highest\_value As Double

highest\_value = ws.Cells(2, 12).Value

'redefine lastrow for challenge as first lastrow request was not working

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

For j = 2 To lastrow

'conditional for challenge request

If ws.Cells(j, 11).Value > best\_value Then

best\_value = ws.Cells(j, 11).Value

best\_stk = ws.Cells(j, 9).Value

End If

If ws.Cells(j, 11).Value < wrst\_value Then

wrst\_value = ws.Cells(j, 11).Value

wrst\_stk = ws.Cells(j, 9).Value

End If

If ws.Cells(j, 12).Value > highest\_value Then

highest\_value = ws.Cells(j, 12).Value

highest\_stk = ws.Cells(j, 9).Value

End If

Next j

'fill summary table for yearly analysis challenge

ws.Range("P2").Value = best\_stk

ws.Range("Q2").Value = best\_value

ws.Range("Q2").NumberFormat = "0.00%"

ws.Range("P3").Value = wrst\_stk

ws.Range("Q3").Value = wrst\_value

ws.Range("Q3").NumberFormat = "0.00%"

ws.Range("P4").Value = highest\_stk

ws.Range("Q4").Value = highest\_value

Next ws

End Sub