Sub stockdata()

'Declare a variable ws that allows the user to refer to a worksheet object in your VBA code using the ws variable.

Dim ws As Worksheet

'The code the will setup a loop that will iterate through each worsheet in the workbook and assign to the variable 'ws' one at a time.

For Each ws In ThisWorkbook.Worksheets

Application.CutCopyMode = False

'-----VARIABLE DECLARATIONS-------------

Dim ticker As String ' Set a variable for holding the stock name

Dim lastrow As Long ' variable determining the last row of the table.

Dim open\_price As Double 'Variable name holding the opening price of a stock

Dim close\_price As Double 'Variable name holding the closing price of a stock

' Set a variable for holding the stock total for a particular ticker and initializing it to value 0

Dim stock\_total As Double

stock\_total = 0

'Set a variable to keep track of row number in summary table

Dim summary\_row As Integer

summary\_row = 2

'Set a variable to hold the difference between the closing price and opening price of a particular stock

Dim year\_diff As Double

'Variable to hold the percentage change in stock value

Dim Percent\_change As Double

'Determining the last row of the data table

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

'Setting thecolumn titles of the summary table

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

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

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

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

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

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

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

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

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

'-----GETTING VALUES FOR THE SUMMARY TABLE--------------------------

'Looping through all records

For i = 2 To lastrow Step 1

'If previous ticker and the next ticker is not the same, then

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

'Retrieving the opening price of the stock and assigning it to variable open\_price

open\_price = ws.Cells(i, 3)

'If current ticker and the next ticker is not the same, then

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

'assigning stock name to ticker variable

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

'Add the stock volume to the the stock\_total variable

stock\_total = stock\_total + ws.Cells(i, 7).Value

'Setting the closing price of the stock for the year to variable

close\_price = ws.Cells(i, 6).Value

'Calculate the difference between the closing and the opening price of the stock

year\_diff = close\_price - open\_price

'Calculating the percentage change between the closing and the opening price of the stock.

'When the opening price of the first stock of the table is retrieved the opening price is null hence an error is generated, so the handle that error

Percent\_change = year\_diff / open\_price

On Error Resume Next

'Display unique stock name in the summary table.

ws.Range("I" & summary\_row).Value = ticker

'Display the yearly change of a particular stock in the summary table

ws.Range("J" & summary\_row).Value = year\_diff

'Display the percent change in the summary table and formatting the values in the percentage format

ws.Range("K" & summary\_row).Value = Percent\_change

'Display the stock total in the summary table

ws.Range("L" & summary\_row).Value = stock\_total

'Adding 1 to the summary\_row variable which ensures that the new unique stock name is entered in the next row

summary\_row = summary\_row + 1

'Resetting the stock volume total so that it isnt carried to the next stock

stock\_total = 0

Else

'Add the stock volume value to the stock total variable

stock\_total = stock\_total + ws.Cells(i, 7).Value

End If

Next i

'--------SUMMARY TABLE OPERATIONS-------------

'Determining the lastrow of the summary table, Summary table starts from I column to L column

' Add section to display greatest percent increase, greatest percent decrease, and greatest total volume for each year.

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

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

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

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

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

' Get the last row

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

' Initialize variables and set values of variables initially to the first row in the list.

greatest\_percent\_increase = ws.Cells(2, 11).Value

greatest\_percent\_increase\_ticker = ws.Cells(2, 9).Value

greatest\_percent\_decrease = ws.Cells(2, 11).Value

greatest\_percent\_decrease\_ticker = ws.Cells(2, 9).Value

greatest\_stock\_volume = ws.Cells(2, 12).Value

greatest\_stock\_volume\_ticker = ws.Cells(2, 9).Value

'loop through the list of tickers.

For i = 2 To lastRowState

' Find the ticker with the greatest percent increase.

If ws.Cells(i, 11).Value > greatest\_percent\_increase Then

greatest\_percent\_increase = ws.Cells(i, 11).Value

greatest\_percent\_increase\_ticker = ws.Cells(i, 9).Value

End If

' Find the ticker with the greatest percent decrease.

If ws.Cells(i, 11).Value < greatest\_percent\_decrease Then

greatest\_percent\_decrease = ws.Cells(i, 11).Value

greatest\_percent\_decrease\_ticker = ws.Cells(i, 9).Value

End If

' Find the ticker with the greatest stock volume.

If ws.Cells(i, 12).Value > greatest\_stock\_volume Then

greatest\_stock\_volume = ws.Cells(i, 12).Value

greatest\_stock\_volume\_ticker = ws.Cells(i, 9).Value

End If

'Changing the color of the yearly change columm as per value, below 0 is red and above 0 is green.

If ws.Cells(i, 10).Value >= 0 Then

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

Else

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

End If

Next i

' Add the values for greatest percent increase, decrease, and stock volume to each worksheet and formatting the columns to desired format.

ws.Range("P2").Value = (greatest\_percent\_increase\_ticker)

ws.Range("Q2").Value = Format(greatest\_percent\_increase, "Percent")

ws.Range("P3").Value = (greatest\_percent\_decrease\_ticker)

ws.Range("Q3").Value = Format(greatest\_percent\_decrease, "Percent")

ws.Range("P4").Value = greatest\_stock\_volume\_ticker

ws.Range("Q4").Value = Format(greatest\_stock\_volume, "Scientific")

ws.Range("K2:K" & lastrow).NumberFormat = "0.00%"

'Autofitting the cells of the worksheet so that

ws.UsedRange.EntireColumn.AutoFit

Next ws

End Sub