Sub Challenge2()

Dim i As Long

Dim j As Long

Dim LastRow As Long

Dim Ticker As String

Dim OpeningPrice As Double

Dim ClosingPrice As Double

Dim Total\_Stock\_Volume As Double

Dim PercentageChange As Double

Dim QuarterlyChange As Double

Dim GreatestIncrease As Double

Dim GreatestDecrease As Double

Dim GreatestVolume As Double

Dim GreatestIncreaseTicker As String

Dim GreatestDecreaseTicker As String

Dim GreatestVolumeTicker As String

GreatestIncrease = -1

GreatestDecrease = 1

GreatestVolume = 0

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

Cells(1, 10).Value = "Quarterly Change"

Cells(1, 11).Value = "Percentage Change"

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

Total\_Stock\_Volume = 0

OpeningPrice = Cells(2, 3).Value

j = 2 ' Initialize output row

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

For i = 2 To LastRow

' Check if the ticker changes or we reach the last row

If Cells(i, 1).Value <> Cells(i + 1, 1).Value Or i = LastRow Then

Ticker = Cells(i, 1).Value

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

ClosingPrice = Cells(i, 6).Value

QuarterlyChange = ClosingPrice - OpeningPrice

PercentageChange = QuarterlyChange / OpeningPrice

Cells(j, 9).Value = Ticker

Cells(j, 10).Value = QuarterlyChange

Cells(j, 11).Value = PercentageChange

Cells(j, 12).Value = Total\_Stock\_Volume

With Cells(j, 11)

.FormatConditions.Delete

.FormatConditions.Add Type:=xlCellValue, Operator:=xlGreater, Formula1:="0"

.FormatConditions(1).Interior.Color = RGB(0, 255, 0) ' Green

.FormatConditions.Add Type:=xlCellValue, Operator:=xlLess, Formula1:="0"

.FormatConditions(2).Interior.Color = RGB(255, 0, 0) ' Red

End With

' Check for greatest percentage increase

If PercentageChange > GreatestIncrease Then

GreatestIncrease = PercentageChange

GreatestIncreaseTicker = Ticker

End If

' Check for greatest percentage decrease

If PercentageChange < GreatestDecrease Then

GreatestDecrease = PercentageChange

GreatestDecreaseTicker = Ticker

End If

' Check for greatest total volume

If Total\_Stock\_Volume > GreatestVolume Then

GreatestVolume = Total\_Stock\_Volume

GreatestVolumeTicker = Ticker

End If

j = j + 1 ' Move to the next row for output

If i < LastRow Then

OpeningPrice = Cells(i + 1, 3).Value ' Reset the opening price for the next ticker

End If

Total\_Stock\_Volume = 0 ' Reset the total volume for the next ticker

Else

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

End If

Next i

' Output the greatest values

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

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

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

Cells(2, 16).Value = GreatestIncreaseTicker

Cells(2, 17).Value = GreatestIncrease

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

Cells(3, 16).Value = GreatestDecreaseTicker

Cells(3, 17).Value = GreatestDecrease

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

Cells(4, 16).Value = GreatestVolumeTicker

Cells(4, 17).Value = GreatestVolume

MsgBox "Calculation Complete!"

End Sub