Sub Calculating()

' Subrutine that displays opening and closing price for the year. Percentage change from the opening price at the beginning of a year and the closing price at the end of that year. \_

The total stock volume of the stock . During the year?

Dim All\_wks As Worksheet

Dim Stk\_vol As Double, EOY\_price As Double, BOY\_price As Double, Yr\_chg As Double, Pct\_chg As Double

Dim w As Integer, s As Integer, r As Double

Dim Ticker As String

'Call routine that clears data

Call Initialize

'Check every worsheet, calculates changes and copy values to summary table

For Each All\_wks In Worksheets

'Count rows of database

Num\_rows = All\_wks.Range("A:A").SpecialCells(xlCellTypeLastCell).Row

'Set initial values for the variables

Ticker = ""

r = 1

s = 1

'Select ticker and price at the beginning of the year. Begins adding up the volume

Do While r <= Num\_rows

If All\_wks.Cells(r + 1, 1).Value <> Ticker Then

Ticker = All\_wks.Cells(r + 1, 1).Value

BOY\_price = All\_wks.Cells(r + 1, 3).Value

Stk\_vol = All\_wks.Cells(r + 1, 7).Value

r = r + 1

Else 'Obtains last price of the year and adds up the volume

Do While All\_wks.Cells(r + 1, 1).Value = Ticker

EOY\_price = All\_wks.Cells(r + 1, 6).Value 'allwks

Stk\_vol = All\_wks.Cells(r + 1, 7).Value + Stk\_vol 'allwks

r = r + 1

Loop

Yr\_chg = EOY\_price - BOY\_price

Pct\_chg = Yr\_chg / BOY\_price

All\_wks.Cells(s + 1, 9).Value = Ticker

All\_wks.Cells(s + 1, 10).Value = Yr\_chg

All\_wks.Cells(s + 1, 11).Value = Pct\_chg

All\_wks.Cells(s + 1, 12).Value = Stk\_vol

'Condittional formating for cells. Red negative values, green positive values.

If Yr\_chg < 0 Then

All\_wks.Cells(s + 1, 10).Interior.ColorIndex = 3 'vbRed

Else

All\_wks.Cells(s + 1, 10).Interior.ColorIndex = 4 'vbGreen

End If

'Counter for the table with results

s = s + 1

End If

Loop

Next All\_wks

'Call routine that calculate the stock with greatest changes

Call Greatest

End Sub

Sub Initialize()

' Routine that begins the process by clearing all the data in the output columns.

' Initial message

Ini = MsgBox("Calculate the changes in price and volume for the stocks in each of the years from 2018 to 2020", vbOKOnly, "Created by Claudia Yurrita")

Dim wks As Worksheet

'Clear the range of calculations in all the worksheets and write down the name of the columns being calculated

For Each wks In Worksheets

wks.Range("I:U").Clear

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

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

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

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

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

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

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

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

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

wks.Range("J:J").NumberFormat = "#0.00"

wks.Range("K:K,Q2:Q3").NumberFormat = "0.00%"

wks.Range("L:L,Q4").NumberFormat = "#,000"

wks.Range("I:I").ColumnWidth = 12

wks.Range("J:L, Q:Q").ColumnWidth = 18

wks.Range("O:O").ColumnWidth = 22

Next wks

End Sub

Sub Greatest()

'Displays the stocks with the greatest changes during each year

Dim wks As Worksheet, Max\_Row As Double, i As Double, t As Double

Dim Great\_Incr As Double, Great\_Decr As Double, Great\_Vol As Double, GIncr\_Stock As String, GDecr\_Stock As String, GVol\_Stock As String

'Finds the stocks with biggest changes for each Worksheet in the Workbook

For Each wks In Worksheets

'Count the rows

Max\_Row = wks.Cells(Rows.Count, 9).End(xlUp).Row

'Obtain the biggest values

wks.Activate

Great\_Incr = Application.Max(Range(Cells(2, 11), Cells(Max\_Row, 11)))

Great\_Decr = Application.Min(Range(Cells(2, 11), Cells(Max\_Row, 11)))

Great\_Vol = Application.Max(Range(Cells(2, 12), Cells(Max\_Row, 12)))

'Check every cell to obtain the name of the stocks with the biggest changes and oeprtaed volumen

For i = 1 To Max\_Row

If wks.Cells(i, 11).Value = Great\_Incr Then '

GIncr\_Stock = wks.Cells(i, 9).Value

End If

If wks.Cells(i, 11).Value = Great\_Decr Then

GDecr\_Stock = wks.Cells(i, 9).Value

End If

If wks.Cells(i, 12).Value = Great\_Vol Then '

GVol\_Stock = wks.Cells(i, 9).Value

End If

Next i

'Copy the name of the selected stocks and their corresponding values

wks.Cells(2, 16).Value = GIncr\_Stock

wks.Cells(2, 17).Value = Great\_Incr

wks.Cells(3, 16).Value = GDecr\_Stock

wks.Cells(3, 17).Value = Great\_Decr

wks.Cells(4, 16).Value = GVol\_Stock

wks.Cells(4, 17).Value = Great\_Vol

Next wks

End Sub