Sub yearValueAnalysis()

'initialize variables for Timer Function (tells you how long the code takes to run)

Dim startTime As Single

Dim endTime As Single

yearValue = InputBox("What year would you like to run the analysis on?")

'Start theTimer Fucntion

startTime = Timer

'1) Format the output sheet on All Stocks Analysis worksheet

Worksheets("All Stocks Analysis").Activate

Range("A1").Value = "All Stocks (" + yearValue + ")"

'Create a header row

Cells(3, 1).Value = "Ticker"

Cells(3, 2).Value = "Total Daily Volume"

Cells(3, 3).Value = "Return"

'2) Initialize array of all tickers

Dim tickers(12) As String

tickers(0) = "AY"

tickers(1) = "CSIQ"

tickers(2) = "DQ"

tickers(3) = "ENPH"

tickers(4) = "FSLR"

tickers(5) = "HASI"

tickers(6) = "JKS"

tickers(7) = "RUN"

tickers(8) = "SEDG"

tickers(9) = "SPWR"

tickers(10) = "TERP"

tickers(11) = "VSLR"

'3a) Initialize variables for starting price and ending price

Dim startingPrice As Double

Dim endingPrice As Double

'3b) Activate data worksheet

Worksheets(yearValue).Activate

'3c) Get the number of rows to loop over

RowCount = Cells(Rows.Count, "A").End(xlUp).Row

'4) Loop through tickers (starting outer loop "i")

For i = 0 To 11

ticker = tickers(i)

totalVolume = 0

'5) loop through rows in the data (starting nested loop "j")

Worksheets(yearValue).Activate

For j = 2 To RowCount

'5a) Get total volume for current ticker

If Cells(j, 1).Value = ticker Then

'increase totalVolume by the value in the current row

totalVolume = totalVolume + Cells(j, 8).Value

End If

'5b) get starting price for current ticker

If Cells(j - 1, 1).Value <> ticker And Cells(j, 1).Value = ticker Then

startingPrice = Cells(j, 6).Value

End If

'5c) get ending price for current ticker

If Cells(j + 1, 1).Value <> ticker And Cells(j, 1).Value = ticker Then

endingPrice = Cells(j, 6).Value

End If

'Ending nesteed loop"j"

Next j

'6) Output data for current ticker

Worksheets("All Stocks Analysis").Activate

Cells(4 + i, 1).Value = ticker

Cells(4 + i, 2).Value = totalVolume

Cells(4 + i, 3).Value = (endingPrice / startingPrice) - 1

'Ending outer loop "i"

Next i

'Formatting

Worksheets("All Stocks Analysis").Activate

Range("A3:C3").Font.FontStyle = "Bold"

Range("A3:C3").Borders(xlEdgeBottom).LineStyle = xlContinuous

Range("B4:B15").NumberFormat = "#,##0"

Range("C4:C15").NumberFormat = "0.0%"

Columns("B").AutoFit

dataRowStart = 4

dataRowEnd = 15

For i = dataRowStart To dataRowEnd

If Cells(i, 3) > 0 Then

Cells(i, 3).Interior.Color = vbGreen

Else

Cells(i, 3).Interior.Color = vbRed

End If

Next i

'End the Timer Function &have a pop-up msg read out how long it took to run the code

endTime = Timer

MsgBox "This code ran in " & (endTime - startTime) & " seconds for the year " & (yearValue)

'MsgBox (totalVolume) - can use this to test if code ran successfully

End Sub