Option Explicit

Type TypeOfResult

ticker As String

price\_begin As Single ' Currency

price\_end As Single ' Currency

volume As Double

End Type

Sub Calculate\_Results()

Dim current\_worksheet As Worksheet

' Do for each worksheet in this workbook

For Each current\_worksheet In ThisWorkbook.Worksheets

Call Calculate\_Subtotals(current\_worksheet)

Next current\_worksheet

MsgBox ("Work is done")

End Sub

Sub Calculate\_Subtotals(ws As Worksheet)

Dim arr\_results() As TypeOfResult

Dim l\_Row, l\_RowLast, l\_ColLast As Long

Dim s\_ColLastLetter As String

Dim v\_max, v\_min, v\_max\_vol As Variant

Dim d\_price\_change As Double

Dim i, j As Long

Dim r As range

' Do for current worksheet

With ws

.Select

' Header for total table

.range("I1").Value = "Ticker"

.range("J1").Value = "Yearly Change"

.range("K1").Value = "Percent Change"

.range("L1").Value = "Total Stock Volume"

' Header for Max % Increase , Max, Max % Decrease and Max Volume

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

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

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

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

.range("Q1").Value = "Value"

' Total header formatting

.range("O2:O4").Font.Bold = True

.range("P1").Font.Bold = True

.range("Q1").Font.Bold = True

' Resulting cells formatting

.range("P2:Q4").Interior.ColorIndex = 36

' Find the last row that contains data

l\_RowLast = .Cells(Rows.Count, 1).End(xlUp).Row

' Find the last column that contains data

l\_ColLast = .Cells(1, Columns.Count).End(xlToLeft).Column

' Find the last column letter

s\_ColLastLetter = Split((.Columns(l\_ColLast).Address(, 0)), ":")(0)

' change / adjust the size of resulting array

j = 1

ReDim arr\_results(1 To j)

' Assignment for the first iteration

arr\_results(j).ticker = .Cells(2, 1).Value

arr\_results(j).price\_begin = .Cells(2, 3).Value

arr\_results(j).volume = .Cells(2, 7).Value

' setup a loop that will go until it reaches the last row

For i = 3 To l\_RowLast

If arr\_results(j).ticker = .Cells(i, 1).Value Then

' Summarise volume

arr\_results(j).volume = arr\_results(j).volume + .Cells(i, 7).Value

Else

' Close price for previous ticker

arr\_results(j).price\_end = .Cells(i - 1, 6).Value

' change / adjust the size of array

j = j + 1

ReDim Preserve arr\_results(1 To j)

' Assignments for new ticker

arr\_results(j).ticker = .Cells(i, 1).Value

arr\_results(j).price\_begin = .Cells(i, 3).Value

arr\_results(j).volume = .Cells(i, 7).Value

End If

Next i

' Close price for last ticker

arr\_results(j).price\_end = .Cells(l\_RowLast, 6).Value

' Print total data for each ticker under header row

For j = 1 To UBound(arr\_results)

' change of price

d\_price\_change = arr\_results(j).price\_end - arr\_results(j).price\_begin

.Cells(j + 1, 9).Value = arr\_results(j).ticker

.Cells(j + 1, 10).Value = d\_price\_change

If arr\_results(j).price\_begin = 0 Then

.Cells(j + 1, 11).Value = 0

Else

.Cells(j + 1, 11).Value = Application.WorksheetFunction.Round(d\_price\_change / arr\_results(j).price\_begin, 4)

End If

.Cells(j + 1, 12).Value = arr\_results(j).volume

' Format cells

If (.Cells(j + 1, 10).Value >= 0) Then

.Cells(j + 1, 10).Interior.ColorIndex = 4

Else

.Cells(j + 1, 10).Interior.ColorIndex = 3

End If

Next j

' set range for searching of max and min value of percent

Set r = range(.Cells(2, 11).Address(), .Cells(UBound(arr\_results) + 1, 11).Address())

r.NumberFormat = "0.00%"

' Greatest % Increase

v\_max = WorksheetFunction.max(r)

l\_Row = WorksheetFunction.Match(v\_max, r, 0)

.range("P2").Value = .Cells(l\_Row + 1, 9).Value

.range("Q2").NumberFormat = "0.00%"

.range("Q2").Value = v\_max

' Greatest % Decrease

v\_min = WorksheetFunction.Min(r)

l\_Row = WorksheetFunction.Match(v\_min, r, 0)

.range("P3").Value = .Cells(l\_Row + 1, 9).Value

.range("Q3").NumberFormat = "0.00%"

.range("Q3").Value = v\_min

' Set range for searching of max value of volume

Set r = .range(.Cells(2, 12).Address(), .Cells(UBound(arr\_results) + 1, 12).Address())

r.NumberFormat = "General"

' Greatest Total Volume

v\_max\_vol = WorksheetFunction.max(r)

l\_Row = WorksheetFunction.Match(v\_max\_vol, r, 0)

.range("P4").Value = .Cells(l\_Row + 1, 9).Value

.range("Q4").NumberFormat = "General"

.range("Q4").Value = v\_max\_vol

' Set AutoFit

.Columns("A:" & s\_ColLastLetter).AutoFit

End With

Erase arr\_results

Set r = Nothing

End Sub