**Unit 2 | Assignment - The VBA of Wall Street**

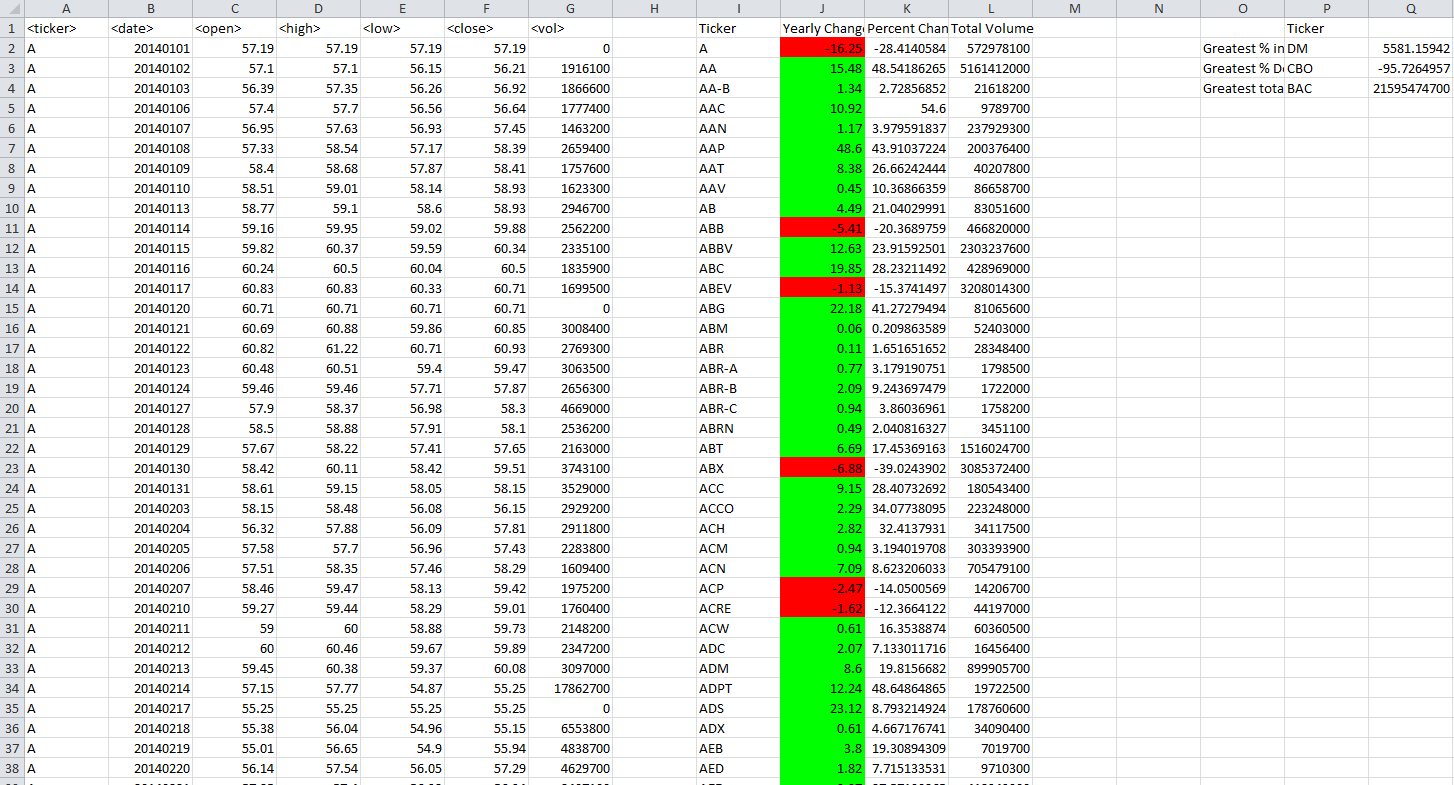
**RESUME**

Trying to simulate an original situation, I assumed the records were not ordered by ticker or date. I used the collections implemented by Excel and a custom class which helped me to implement all the logic needed to obtain a resume with the required information.

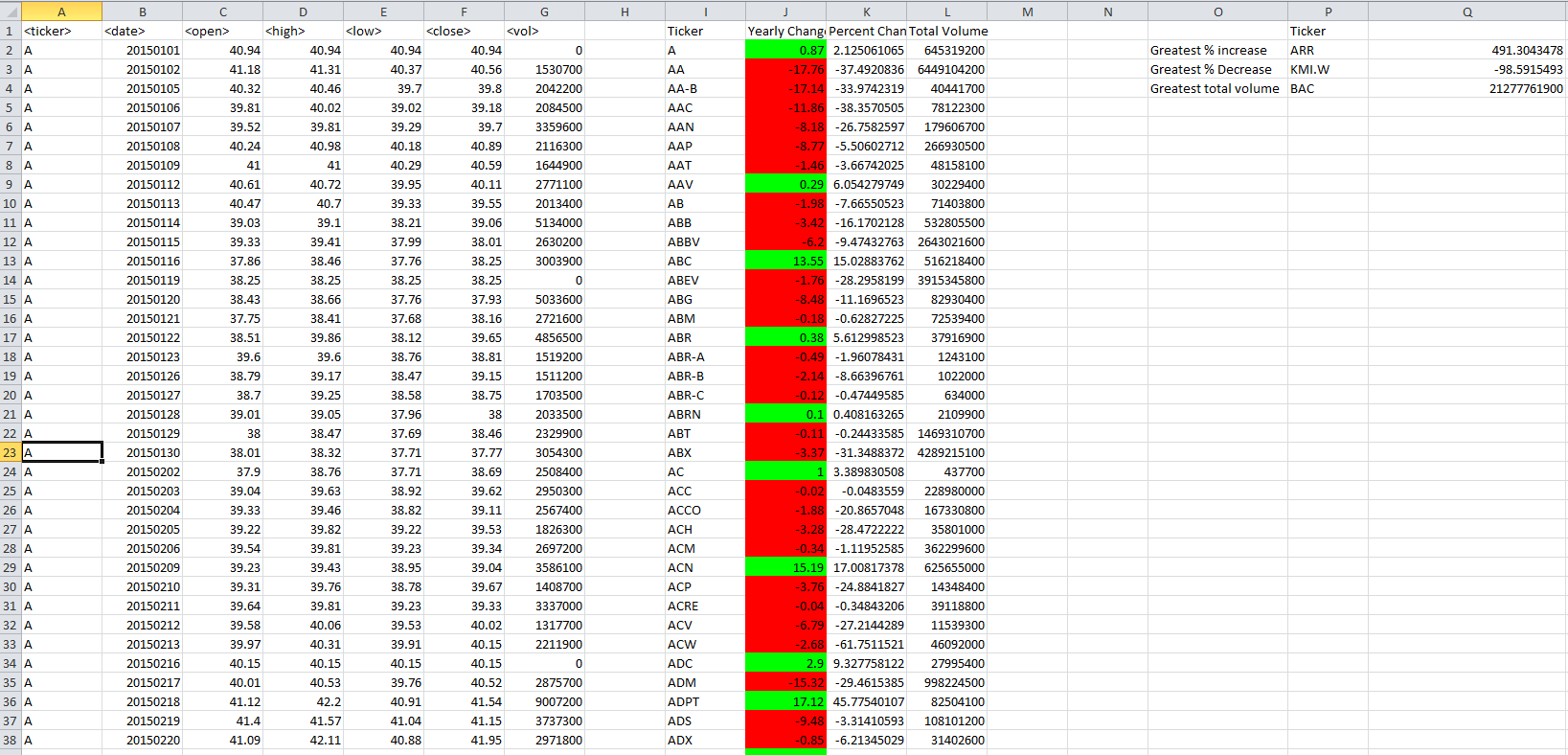
As it was required it moves into each sheet and create the consolidated table with the information.

**SCREENSHOTS**

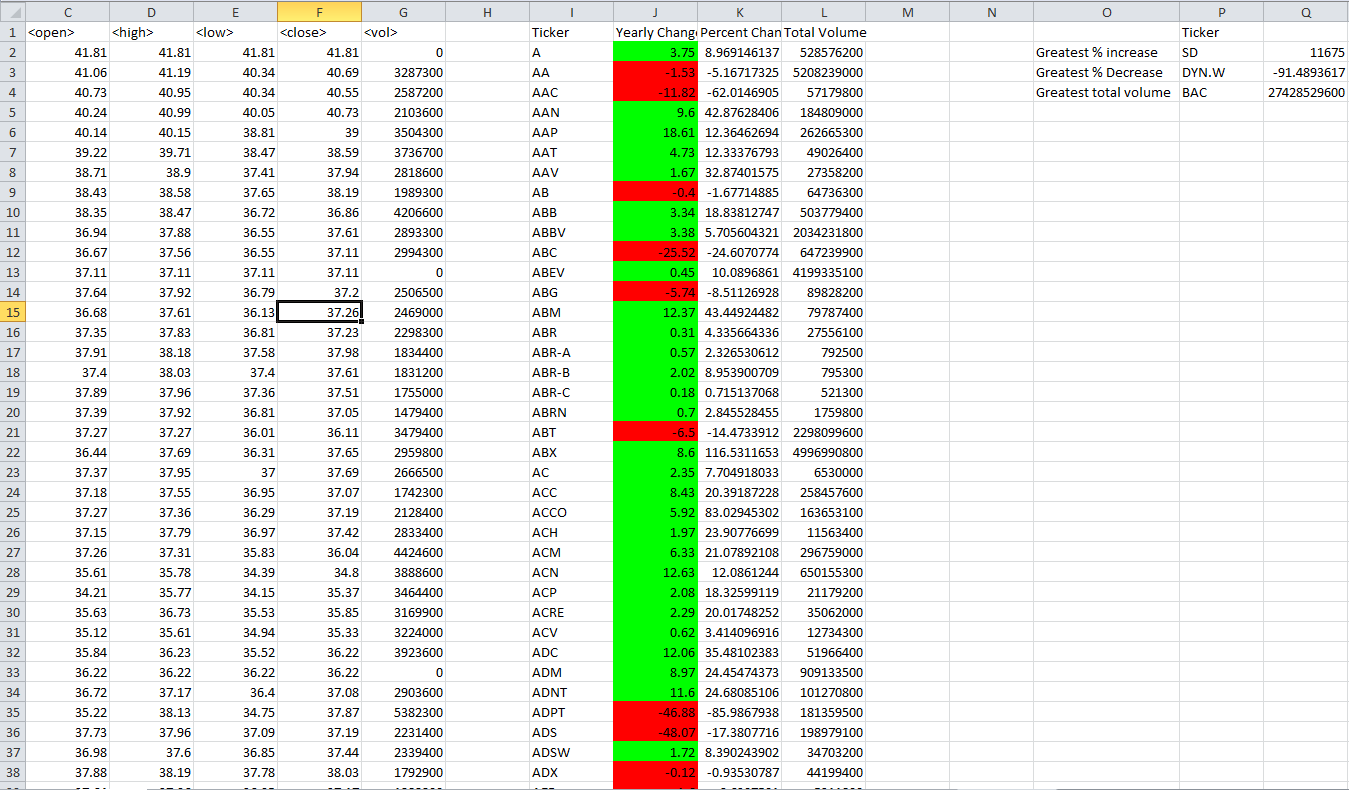
**Year 2014**



**Year 2015**



**Year 2016**



**SOURCE CODE**

**Code of Module**

Dim tabla\_final As New Collection

Dim element As cl\_final

Sub get\_total\_volume()

Dim sh As Worksheet

Dim rw As Range

Dim element2 As cl\_final

Dim TotalRange As Range

Set tabla\_final = New Collection

Dim min\_change As Double

Dim max\_change As Double

Dim max\_total As Double

Dim ticker\_min\_change As String

Dim ticker\_max\_change As String

Dim ticker\_max\_total As String

Dim indexRow As Integer

For Each sh In ThisWorkbook.Worksheets

sh.Activate

Set TotalRange = sh.UsedRange

Set TotalRange = TotalRange.Offset(1, 0).Resize(TotalRange.Rows.Count - 1, TotalRange.Columns.Count)

For Each rw In TotalRange.Rows

Set element2 = searchInFinal(Cells(rw.Row, 1).Value)

If Not element2 Is Nothing Then

element2.Total\_Volume = Cells(rw.Row, 7).Value + element2.Total\_Volume

If Cells(rw.Row, 2).Value > element2.Date\_Close Then

element2.Close\_Stock = Cells(rw.Row, 6).Value

element2.Date\_Close = Cells(rw.Row, 2).Value

End If

If Cells(rw.Row, 2).Value < element2.Date\_Open Then

element2.Date\_Open = Cells(rw.Row, 2).Value

element2.Open\_Stock = Cells(rw.Row, 3).Value

End If

element2.Yearly\_Change = element2.Close\_Stock - element2.Open\_Stock

If element2.Open\_Stock <> 0 Then

element2.Percent\_Change = (element2.Yearly\_Change \* 100) / element2.Open\_Stock

Else

element2.Percent\_Change = 0

End If

Else

Set element2 = New cl\_final

element2.Ticker = Cells(rw.Row, 1).Value

element2.Total\_Volume = Cells(rw.Row, 7).Value

element2.Date\_Open = Cells(rw.Row, 2).Value

element2.Date\_Close = Cells(rw.Row, 2).Value

element2.Open\_Stock = Cells(rw.Row, 3).Value

element2.Close\_Stock = Cells(rw.Row, 6).Value

element2.Yearly\_Change = element2.Close\_Stock - element2.Open\_Stock

If element2.Open\_Stock <> 0 Then

element2.Percent\_Change = (element2.Yearly\_Change \* 100) / element2.Open\_Stock

Else

element2.Percent\_Change = 0

End If

tabla\_final.Add element2

Set element2 = Nothing

End If

Next rw

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

Cells(1, "J").Value = "Yearly Change"

Cells(1, "K").Value = "Percent Change"

Cells(1, "L").Value = "Total Volume"

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

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

Cells(4, "O").Value = "Greatest total volume"

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

indexRow = 2

min\_change = 0

max\_change = 0

max\_volume = 0

Set element = Nothing

For Each element In tabla\_final

Cells(indexRow, "I").Value = element.Ticker

Cells(indexRow, "J").Value = element.Yearly\_Change

If element.Yearly\_Change > 0 Then

Cells(indexRow, "J").Interior.ColorIndex = 4

Else

Cells(indexRow, "J").Interior.ColorIndex = 6

End If

Cells(indexRow, "K").Value = element.Percent\_Change

Cells(indexRow, "L").Value = element.Total\_Volume

indexRow = indexRow + 1

If element.Percent\_Change < min\_change Then

ticker\_min\_change = element.Ticker

min\_change = element.Percent\_Change

End If

If element.Percent\_Change > max\_change Then

ticker\_max\_change = element.Ticker

max\_change = element.Percent\_Change

End If

If element.Total\_Volume > max\_volume Then

ticker\_max\_volume = element.Ticker

max\_volume = element.Total\_Volume

End If

Next element

Cells(2, "P").Value = ticker\_max\_change

Cells(3, "P").Value = ticker\_min\_change

Cells(4, "P").Value = ticker\_max\_volume

Cells(2, "Q").Value = max\_change

Cells(3, "Q").Value = min\_change

Cells(4, "Q").Value = max\_volume

Set tabla\_final = Nothing

Next sh

End Sub

Function searchInFinal(ByVal pTicker As String) As cl\_final

Dim element As cl\_final

For Each element In tabla\_final

If (element.Ticker = pTicker) Then

Set searchInFinal = element

Exit For

End If

Next element

End Function

Function setVolume(ByRef pVoloume As Long)

Dim element As typeConsolidated

For Each element In table\_final

If (element.Ticker = pElement.Ticker) Then

element.Total\_Volume = pvolume

Exit For

End If

Next element

End Function

**Class**

Private aTicker As String

Private aYearly\_Change As Double

Private aPercent\_Change As Double

Private aTotal\_Volume As Double

Private aDate\_Open As Long

Private aDate\_Close As Long

Private aOpen\_Stock As Double

Private aClose\_Stock As Double

' Properties

Property Get Ticker() As String

Ticker = aTicker

End Property

Property Let Ticker(dTicker As String)

aTicker = dTicker

End Property

Property Get Yearly\_Change() As Double

Yearly\_Change = aYearly\_Change

End Property

Property Let Yearly\_Change(dYearly\_Change As Double)

aYearly\_Change = dYearly\_Change

End Property

Property Get Percent\_Change() As Double

Percent\_Change = aPercent\_Change

End Property

Property Let Percent\_Change(dPercent\_Change As Double)

aPercent\_Change = dPercent\_Change

End Property

Property Get Total\_Volume() As Double

Total\_Volume = aTotal\_Volume

End Property

Property Let Total\_Volume(dTotal\_Volume As Double)

aTotal\_Volume = dTotal\_Volume

End Property

Property Get Date\_Open() As Long

Date\_Open = aDate\_Open

End Property

Property Let Date\_Open(dDate\_Open As Long)

aDate\_Open = dDate\_Open

End Property

Property Get Date\_Close() As Long

Date\_Close = aDate\_Close

End Property

Property Let Date\_Close(dDate\_Close As Long)

aDate\_Close = dDate\_Close

End Property

Property Get Open\_Stock() As Double

Open\_Stock = aOpen\_Stock

End Property

Property Let Open\_Stock(dOpen\_Stock As Double)

aOpen\_Stock = dOpen\_Stock

End Property

Property Get Close\_Stock() As Double

Close\_Stock = aClose\_Stock

End Property

Property Let Close\_Stock(dClose\_Stock As Double)

aClose\_Stock = dClose\_Stock

End Property

' Event - triggered when class created

' Methods

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