

```
Sub AllStocksAnalysisRefactored()
```

```
    Dim startTime As Single
```

```
    Dim endTime As Single
```

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

```
    startTime = Timer
```

'Format the output sheet on All Stocks Analysis worksheet, it was provided with the assignment challenge section 2.5.3 Run the Analysis for any year

```
    Worksheets("All Stocks Analysis").Activate
```

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

'Create a header row, it was provided in the challenge but it was studied in sectionwe did a similar excersize in Step 6, Section 2.3.3 Reuse Code and in previous sections

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

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

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

'Initialize array of all tickersit was provided in the challenge but it was studied in section 2.3.1, also, we did a similar excersize in Step 6, Section 2.3.3 Reuse Code

```
    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"
```

```
'Activate data worksheet
```

```
Worksheets(yearValue).Activate
```

```
'Get the number of rows to loop over
```

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

```
'Challenge 1a. Create a ticker Index; we did a similar excersize in Step 4, Section 2.3.3 Reuse Code
```

```
For i = 0 To 11
```

```
    tickerIndex = tickers(i)
```

```
'Challenge 1b.Create three output arrays,
```

```
Dim tickerVolumes As Long
```

```
Dim tickerStartingPrices As Single, tickerEndingPrices As Single
```

```
"Challenge 2a.Create a for loop to initialize the tickerVolumes to zero.
```

'If the next row's ticker doesn't match, increase the tickerIndex.

Worksheets(yearValue).Activate

tickerVolumes = 0

"Challenge 2b. Loop over all the rows in the spreadsheet.

For j = 2 To RowCount

' If the next row's ticker doesn't match, increase the tickerIndex.

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

'Challenge 3a. Increase volume for current ticker

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

End If

'Challenge 3b. Check if the current row is the first row with the selected tickerIndex.

'If Then

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

tickerStartingPrices = Cells(j, 6).Value

'End If

End If

'Challenge 3c. check if the current row is the last row with the selected ticker

'If Then

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

```
    tickerEndingPrices = Cells(j, 6).Value
```

```
'End If
```

```
End If
```

```
Next j
```

'Challenge 4. Loop through your arrays to output the Ticker, Total Daily Volume, and Return.

```
Worksheets("All Stocks Analysis").Activate
```

```
Cells(4 + i, 1).Value = tickerIndex
```

```
Cells(4 + i, 2).Value = tickerVolumes
```

```
Cells(4 + i, 3).Value = tickerEndingPrices / tickerStartingPrices - 1
```

```
'With Range("C4:C15")
```

```
    .NumberFormat = "0.0%"
```

```
    .Value = .Value
```

```
'End With
```

```
Next i
```

'Formatting Source: Module material - 2.4.1 Static 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
```

' Formatting Source: Module Material - 2.4.2 Conditional Formatting

```
dataRowStart = 4
```

```
dataRowEnd = 15
```

```
For i = dataRowStart To dataRowEnd
```

```
    If Cells(i, 3) > 0 Then
```

```
        'Color the cell green
```

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

```
    ElseIf Cells(i, 3) < 0 Then
```

```
        'Color the cell red
```

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

```
    Else
```

```
        'Clear the cell color
```

```
        Cells(i, 3).Interior.Color = xlNone
```

```
    End If
```

```
Next i
```

'Measure Code Performance Source: Module Material - 2.5.3

endTime = Timer

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

End Sub

Sub ClearWorksheet()

' Clear Year from Top Header and Calculated data

Range("A1:A1").Value = "AllStocks(xxxx)"

Range("A3:C15").Clear

End Sub