

Sub StockInfo()

' Define the variables

Dim ws As Worksheet

Dim lastRow As Long, i As Long, startRow As Long

Dim ticker As String, openPrice As Double, closePrice As Double

Dim yearlyChange As Double, percentChange As Double, totalVolume As Double

Dim outputRow As Long ' The row number where the output should start

' Variables for tracking greatest increase, decrease and total volume

Dim greatestIncrease As Double, greatestDecrease As Double, greatestVolume As Double

Dim increaseTicker As String, decreaseTicker As String, volumeTicker As String

' Set the worksheet

Set ws = Workbooks("Multiple\_year\_stock\_data.xlsx").Sheets("2020") ' Replace with your sheet name

' Set the initial output row

outputRow = 2 ' Change to the row where you want the output to start

' Initialize tracking variables

greatestIncrease = 0

greatestDecrease = 0

greatestVolume = 0

' Find the last row of data

lastRow = ws.Cells(Rows.Count, 1).End(xlUp).Row

' Initialize start row

startRow = 2

' Initialize the ticker symbol

ticker = ws.Cells(startRow, 1).Value

' Initialize the opening price

openPrice = ws.Cells(startRow, 3).Value

' Set column titles

ws.Cells(1, 9).Value = "Ticker"

ws.Cells(1, 10).Value = "Yearly Change"

ws.Cells(1, 11).Value = "Percent Change"

ws.Cells(1, 12).Value = "Total Stock Volume"

' Loop through each row of data

For i = startRow To lastRow

    ' Check if we are still within the same ticker symbol

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If ws.Cells(i + 1, 1).Value <> ticker Then

    ' Set the closing price
    closePrice = ws.Cells(i, 6).Value

    ' Calculate the yearly change
    yearlyChange = closePrice - openPrice

    ' Calculate the percentage change
    If openPrice <> 0 Then
        percentChange = yearlyChange / openPrice
    Else
        percentChange = 0
    End If

    ' Calculate the total volume
    totalVolume = Application.WorksheetFunction.Sum(ws.Range(ws.Cells(startRow, 7),
ws.Cells(i, 7)))

    ' Output the results to the worksheet
    With ws.Cells(outputRow, 10)
        .Value = yearlyChange
        ' Clear any existing format conditions
        .FormatConditions.Delete
        ' Add conditional formatting
        .FormatConditions.Add Type:=xlExpression, Formula1:="=" & .Address & "<0"
        .FormatConditions(1).Interior.Color = RGB(255, 0, 0) ' Red for negative
        .FormatConditions.Add Type:=xlExpression, Formula1:="=" & .Address & ">0"
        .FormatConditions(2).Interior.Color = RGB(0, 255, 0) ' Green for positive
    End With

    With ws.Cells(outputRow, 11)
        .Value = percentChange * 100
        ' Clear any existing format conditions
        .FormatConditions.Delete
        ' Add conditional formatting
        .FormatConditions.Add Type:=xlExpression, Formula1:="=" & .Address & "<0"
        .FormatConditions(1).Interior.Color = RGB(255, 0, 0) ' Red for negative
        .FormatConditions.Add Type:=xlExpression, Formula1:="=" & .Address & ">0"
        .FormatConditions(2).Interior.Color = RGB(0, 255, 0) ' Green for positive
    End With

    ws.Cells(outputRow, 9).Value = ticker
    ws.Cells(outputRow, 12).Value = totalVolume

    ' Check if the current ticker has the greatest increase, decrease or volume
    If percentChange > greatestIncrease Then

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    greatestIncrease = percentChange
    increaseTicker = ticker
End If
```

```
If percentChange < greatestDecrease Then
    greatestDecrease = percentChange
    decreaseTicker = ticker
End If
```

```
If totalVolume > greatestVolume Then
    greatestVolume = totalVolume
    volumeTicker = ticker
End If
```

```
' Move on to the next output row
outputRow = outputRow + 1
```

```
' Move on to the next ticker
startRow = i + 1
ticker = ws.Cells(startRow, 1).Value
openPrice = ws.Cells(startRow, 3).Value
```

```
End If
```

```
Next i
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```
' Output the greatest increase, decrease, and volume
ws.Cells(1, 15).Value = ""
ws.Cells(1, 16).Value = "Ticker"
ws.Cells(1, 17).Value = "Value"
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ws.Cells(2, 15).Value = "Greatest % Increase"
ws.Cells(2, 16).Value = increaseTicker
ws.Cells(2, 17).Value = greatestIncrease * 100
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ws.Cells(3, 15).Value = "Greatest % Decrease"
ws.Cells(3, 16).Value = decreaseTicker
ws.Cells(3, 17).Value = greatestDecrease * 100
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ws.Cells(4, 15).Value = "Greatest Total Volume"
ws.Cells(4, 16).Value = volumeTicker
ws.Cells(4, 17).Value = greatestVolume
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End Sub
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