Sub Mod\_2\_Challenge\_Pt4()

Dim ws As Worksheet

Dim lastRow As Long

Dim stockSymbolColumn As Long

Dim dateColumn As Long

Dim closingPriceColumn As Long

Dim percentChangeColumn As Long

Dim i As Long

Dim stockSymbol As String

Dim previousClosingPrice As Double

Dim currentClosingPrice As Double

Dim percentChange As Double

Dim newRow As Long

' Set the worksheet and column numbers

Set ws = ActiveSheet

stockSymbolColumn = 1

dateColumn = 2

closingPriceColumn = 6

percentChangeColumn = 12 ' New column for percent change

' Find the last row in the worksheet

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

' Add a new column for percent change

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

' Initialize variables

stockSymbol = ws.Cells(2, stockSymbolColumn).Value

previousClosingPrice = ws.Cells(2, closingPriceColumn).Value

newRow = 2 ' Start from row 2 to write percent change data

' Loop through the data

For i = 3 To lastRow ' Start from row 3 assuming headers are in row 2

If ws.Cells(i, stockSymbolColumn).Value <> stockSymbol Then

' Calculate and display the percent change when a new stock symbol is encountered

currentClosingPrice = ws.Cells(i - 1, closingPriceColumn).Value

If previousClosingPrice <> 0 Then

percentChange = (currentClosingPrice - previousClosingPrice) / previousClosingPrice

Else

percentChange = 0 ' Avoid division by zero

End If

ws.Cells(newRow, percentChangeColumn).Value = percentChange ' Insert percent change value in the new column

newRow = newRow + 1 ' Move to the next row for the next stock symbol

' Update variables for the new stock symbol

stockSymbol = ws.Cells(i, stockSymbolColumn).Value

previousClosingPrice = currentClosingPrice

End If

Next i

' Calculate and display the percent change for the last stock symbol

currentClosingPrice = ws.Cells(lastRow, closingPriceColumn).Value

If previousClosingPrice <> 0 Then

percentChange = (currentClosingPrice - previousClosingPrice) / previousClosingPrice

Else

percentChange = 0 ' Avoid division by zero

End If

ws.Cells(newRow, percentChangeColumn).Value = percentChange ' Insert percent change value in the last row of the new column

' Format the Percent Change column as Percentage

ws.Range(ws.Cells(2, percentChangeColumn), ws.Cells(newRow, percentChangeColumn)).NumberFormat = "0.00%"

End Sub