I would like to explain my code.

The very first couple of lines is enabling my code to flow through all tabs in the worksheet. I used the following link [How to Loop Through All the Sheets using VBA in Excel (excelchamps.com)](https://excelchamps.com/vba/loop-sheets/) to figure out how to make my below code flow though each tab of my worksheet.

After I wanted to set the titles of each column needed for my calculations. I used a range to set the exact cell location I wanted my string of text. I also wanted to make the titles a different color, so I added a color index using [VBA: ColorIndex Codes List & RGB Colors (automateexcel.com)](https://www.automateexcel.com/excel-formatting/color-reference-for-color-index/).

After setting my titles I set all the variables and variable types needed for calculation. In VBA you need to let it know the type of variable so although most were doubles, I did make the last row a long due to a large data set in Multiple\_year\_stock\_data.

Before starting the loop I need to tell VBA where the open\_price is located. Reading first the column then row. I also needed to keep track where I want the summary table starting and how to let the code know what the last row is. I used this website to find the last row in the column [VBA Tutorial: Find the Last Row, Column, or Cell in Excel (excelcampus.com)](https://www.excelcampus.com/vba/find-last-row-column-cell/).

I now start my loop that will end to what I identified as the last row. I only want the code to make any calculations if the ticker below and above are the exact same so I used an If/then function. For example if ticker 3,1 equals 2,1 then take the ticker letter. I started with volume as it is the simplest. I let the code know it is in column 7 and to sum.

2nd Yearly change because this is needed to find the percent change. I identified the open prior and now needed to identify that the close\_price is in column 6. Yearly change then is a simple equation taking the close\_price – the open\_price.

3rd Now that I set what yearly change is, I can figure out what the precent change is. Percent change is simply the yearly change / open price. The reason I used an if statement prior was to fix any errors when dividing by 0.

Now that all the calculations are made, I tell the code to print the values in the appropriate column in our summary table. I added a number formatting to percent change to be set as the example in the homework with a percent sign.

The homework also wanted us to place conditional formatting in the yearly change. I made all values above 0 green and below 0 red using the color index again.

Now that the first ticker has been set with values, I had to make them reset to 0 values. The last portion of the code is closing my very first if statement.

For the bonus question I already set my variables name and type at the top. I began with another loop that would look at the summary table instead of the data set.

1st In order to find the Greatest total volume I made the code look at row 12 “ Total Stock Volume”. If it was greater than the cell before then make that the value and take the ticker letter associated.

2nd Similar formula to greatest total volume, I used another if /then statement to figure out the Greatest percent decrease. This time I changed the column reference to 11 “Percent Change”. If the percent change value is less than the one before then make that the value and take the ticker letter associated.

3rd To find the greatest percent increase I made a slight difference to greatest percent decrease. The only difference was the less than sign to greater than.

After those values were identified, the code is now directed to place those values to their respective cell. Both the number value and ticker. I used the same percent format function from before to set the percentage once more.

After running my code, I also manually spot checked to ensure my results were correct.