**VBA Challenge assignment**

**Instructions of the Assignment**

A script is to be created that loops the data stock all year taking note of the following.

* The symbol for the Ticker.
* Determine the yearly change from the opening price to the stocks to the closing price at the end of the year.
* The percentage changes from the opening price at the beginning of the year till the end.
* Determine the Total Stock Volume.
* Add functionality to the VBA script to return the Stock with “Greatest percentage Increase”, “Greatest percentage Decrease”, and the “Total Stock Volume”.
* Make appropriate adjustments to the VBA script to make it run through the data every Year.
* Add conditional formatting to the yearly change column and the percentage change column.

**Procedure followed**

* A thorough step by step of how codes were generated on the VBA script based on the data when writing the codes at each step that proceeds logically.

Below is just a bit of explanation to buttress what have been done on the VBA script in the module and the outcome on the excel sheets:

* Variables were defined by also creating ‘’Dim’’
* Defined the headers of all the column numbers that were used. I used the ‘’application.match’’ which is a VBA language to call the headers in the columns and rows.
* Added new headers to generate the yearly data, that’s columns for the Tickers summary, Yearly change, Yearly percentage change and total stock volume.
* For variables to loop through the Stock data without manual computation each year, starting and end rows as well as where Tickers changed. The change was made to reflect the consecutive Tickers that followed. So, I initialize the variables.
* The data was loop through.
* Check if the year has changed. The yearly difference was determined by difference of the close year and the open year. Then the yearly percentage change expressed as a percentage of the difference of the open year and close year to the ratio of the open year.
* Call for the year close ang year volume for the current year.
* Find the last row in the specified column.
* Loop through the data and add the conditional formatting ratings for the selected color to display for positive values and negative values accordingly.
* Loop through the column to find the maximum value of the Stock data set.
* Loop through the columns to find the Greatest percentage increase, Greatest percentage decrease and Greatest total volume.
* Next the whole data and end sub to seal the data.
* The code is finally run in the Visual basic to display the data on the excel sheet.

**Sources for the Assignment**

1. VBA excel sheet from EDx
2. Assistance from my TA
3. Group discussions with my course mates
4. Ask BCS Support
5. Search from the internet for additional information
6. Tutoring sections

**Items Submitted**

1. Excel sheet with the VBA script file (Modules)
2. README in MS word format