

## Assignment 1:

Create a new blank Jupiter notebook and answer all question with the label (Question 1, Question 2 and....)

**Download:** The csv file (WineQT) Dataset

Save as Pdf and submit in Blackboard, folder assignment 1.

Questions	Marks (Total 10)
1. Import numpy and pandas	(0.25)
2. Import visualization libraries and set %matplotlib inline	(0.25)
3. Check the info() of the df	(0.5)
4. Check the head of df	(0.5)
5. What are the top 5 alcohol for wine dataset?	(0.5)
6. What is the data type of the density column?	(0.5)
7. Check how many missing values are in the dataset?	(0.5)
8. Fill missing parts with the appropriate technique based on each column information from the technique you learned in the class.	(2)
9. create a simple plot of the dataframe indicating the alcohol per wine.	(1)
10.Change the name of the column “residual sugar” to “sugar”	(1)
11.Sort the dataset based on “Quality” and “alcohol” feature.	(1)
12.Plot the histogram of “density”.	(1)
13.Plot distribution and relationship in a dataset and analyze the relationship between “fixed acidity” and “pH” columns.	(1)