**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.

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| Questions | Marks  (Total 10) |
| 1. Import numpy and pandas | (0.25) |
| 1. Import visualization libraries and set %matplotlib inline | (0.25) |
| 1. Check the info() of the df | (0.5) |
| 1. Check the head of df | (0. 5) |
| 1. What are the top 5 alcohol for wine dataset? | (0. 5) |
| 1. What is the data type of the density column? | (0. 5) |
| 1. Check how many missing values are in the dataset? | (0.5) |
| 1. Fill missing parts with the appropriate technique based on each column information from the technique you learned in the class. | (2) |
| 1. create a simple plot of the dataframe indicating the alcohol per wine. | (1) |
| 1. Change the name of the column “residual sugar” to “sugar” | (1) |
| 1. Sort the dataset based on “Quality” and “alcohol” feature. | (1) |
| 1. Plot the histogram of “density”. | (1) |
| 1. Plot distribution and relationship in a dataset and analyze the relationship between “fixed acidity” and “pH” columns. | (1) |