**Python programs for ML lab (EE/CSE/ECE/DATA SCIENCE)**

Download the Diamonds dataset from the following link:

<http://www.kaggle.com/shivam2503/diamonds>

(a) Write a Pandas program to read the csv file and print the top 5 rows.

(b) Write a Pandas program to select a series from diamonds Dataset (Read in the form of DataFrame). Print the content of the series.

(c) Write a Pandas program to rename x column to length and y to width.

(d) Write a Pandas program to sort the 'cut' column in ascending order and return it in a Series

(e) Write a Pandas program to find the diamonds that are with a Fair or Good or Premium.

(f) Write a Pandas program to calculate count, minimum, maximum price for each cut of diamonds DataFrame.

(g) Write a Pandas program to create a bar plot of the 'value\_counts' for the 'cut' series of diamonds DataFrame.

(h) Write a Pandas program to print a concise summary of diamonds DataFrame