Assignment Date: 24/01 Assignment Due Date: 7th Feb,2018 (2 weeks)

Note: Why are we doing this? We want to become comfortable in Pandas (if we are not)

Marks: 5

Instruction:

- 1. Mail a Jupyter notebook (use Python 3.0)
- 2. Skills required is: Pandas in Python
- 1. Download the following dataset and understand the dataset

https://archive.ics.uci.edu/ml/datasets/Parkinsons+Telemonitoring

- 2. Load the dataset into data frame
- 3. Provide statistical information about the data (various variables)
- 4. Total_UPDRS column is chosen to be your dependent variable. Drop the other candidate dependent variable motor_UPDRS.
- 5. Look at the data distributions with box plots and histograms. What does the boxplot say about skewed nature of the distribution of each variable?
- 7. Address skewed nature of the distribution by transforming to log values using numpy.
- 8. Create a scatter matrix and comment.
- 9. Do scatter plot analysis of possible independent-dependent variable pair. What will be the possible independent variables candidates for multiple regression?
- 10. Attempt simple regression analysis of the above candidate independent variables using Seaborn library **(optional)**