

### Data Science Task:

Methods used - Linear Regression, Logistic Regression, Random Forest Classifier

Reason - First, I used Linear Regression but since the data requires a classification algorithm to classify Species based on the properties of flower. Hence, we have not get the good results with Linear Regression, then we used two classification models i.e. Logistic Regression and Random Forest Classifier Algorithm.

Approach - I have splitted the data in ratio of 8:2 of training dataset and test dataset, and then applied the models using sklearn library.

Accuracy - I have used the following accuracy methods - model score, Mean squared error, and R-square. We have got good results with classification algorithm.

### EDA:

First, we removed the column of Id, and then made the histogram of individual properties of 4 properties. Then using seaborn library we had created the boxplot of each properties with Species. At the end, I have made correlation matrix of properties.

### Challenges:

I had faced problems during Linear Regression since Species are in string format. So, I have added a new column Species Code and then regress over Species Code as dependent variable.

In EDA, problem were there because of column Id in the data, I have to remove it to make a better PairPlot.