**KNN Regression from scratch without using Sklearn Library:**

Machine Learning algorithms can be classified as unsupervised and supervised learning algorithms. Among them, the KNN regressor (A non-parametric algorithm)belongs to the list of supervised learning algorithms.

KNN Regression is a lazy learning algorithm that calculates the distances from each and every point in the train data with the test data point and calculates the predicted value based on the shortest distance between the train data and test data point

**About the Python code**

I have used a dataset named [knn.csv](http://localhost:8888/edit/Resume/Projects/Resume%20-Projects/Gradient%20Boosting%20Regressor%20from%20scratch/dia.csv). (which has train and test data separately)

The feature in the dataset is given by: **X1, X2, X3**

The label in the dataset is given by:  **y**

Steps that I have followed to calculate the output:

* Take a test data point.
* Calculate the distance between the test data point and each and every

value in the train data.

* Sort the values in ascending order.
* Take the average of the top n values of the actual y values in the train

data.

* Save the averaged outcome to a list.
* Now repeat the steps using a for loop for all the values in the test data

to get all the predicted y values.

* Calculate the MAPE of the actual y and predicted y.
* Perform the same process for the train data.

From the results obtained, the mape of the algorithm coded from scratch is ]matching with the mape of the algorithm from the sklearn library for both train

and test data.