

TEAM NAME: Team Xu

Member: Zhengyuan Xu, Jiacheng Xu

Generative Model: We choose Kmeans. The corresponding file name that contains the function is:

k\_means\_predict\_labels.m

Discriminative Model: We choose Linear Regression. The corresponding file name that contains the function is:

lr\_predict\_labels.m

Instance Based Model: We choose KNN. The corresponding file name that contains the function is:

knn\_predict\_labels.m

Innovative Model: We choose Ensemble Method. The corresponding file name that contains the function is:

ensemble\_predict\_labels.m

**All four functions methods above take same input parameters:**

train\_inputs

train\_labels

test\_inputs

**To run and see the result of all methods, simply run file “ main.m ”**

The order of the test result error is in following order:

Linear Regression, Kmeans, KNN, Ensemble

To see result for specific method, comment out other three and run main.m