Playing with k-NN - Homework 2 Report

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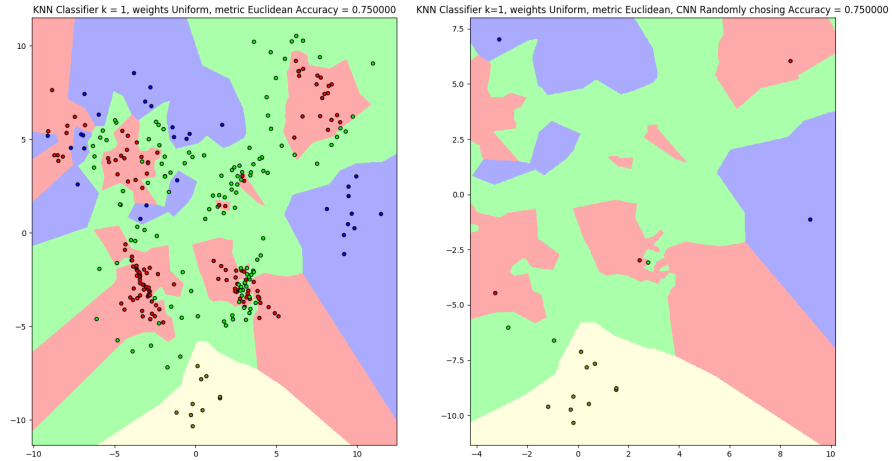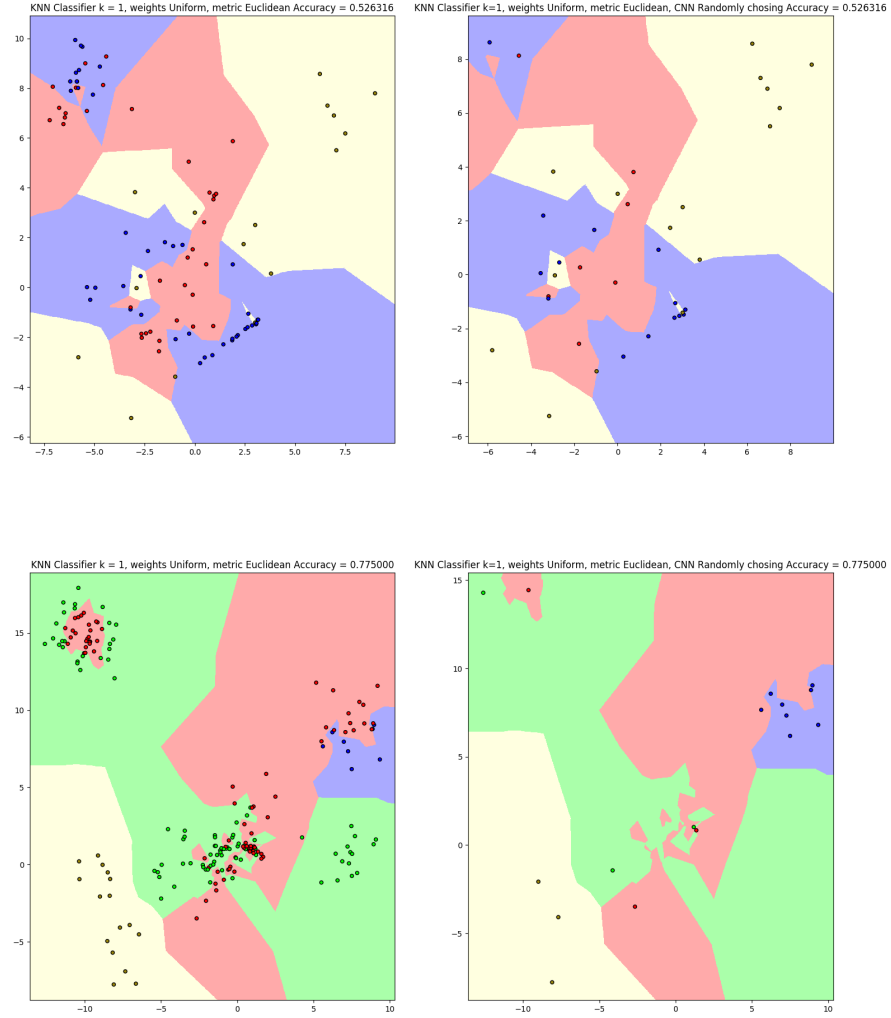
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Data generation

Data is generated using sklearn's data generation functions, for faster processing and harder classification, relatively low number of samples are generated. Also, noise is added to dataset.

Results

Result can be seen as follows

KNN Classifier k = 1, weights Uniform, metric Euclidean Accuracy = 0.526316   KNN Classifier k=1, weights Uniform, metric Euclidean, CNN Randomly chosing Accuracy = 0.526316

KNN Classifier k = 1, weights Uniform, metric Euclidean Accuracy = 0.775000   KNN Classifier k=1, weights Uniform, metric Euclidean, CNN Randomly chosing Accuracy = 0.775000

Therefore, it can be said that, CNN compression method reduces data and increases accuracy.