

## HW1 Report

For every part I ran 5 experiments and recorded the accuracies of each experiments.

Part A has accuracies 71%, 67%, 72%, 76%, 81%.

Part B has accuracies 78%, 67%, 76%, 73%, 69%.

Part C has accuracies 78%, 80%, 69%, 73%, 71%.

Part D has accuracies 78%, 76%, 80%, 78%, 71%.

In general, all parts have predicted the class labels with accuracies in the similar range. Part a and b use naive bayes classifier with normal distribution model but part b takes missing values into account. However, part b does not perform significantly better than part a from my experiments. Part c uses the naive bayes model with cross validation in library and seems to have a little better performance than part a and part b even without the removal of missing values. Part d uses the support vector machine by SVMlight and seems to have good accuracies too.