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CS 498 Homework 1

### Problem 2.1a

Naive Bayes Classifier Results:

Trial	Test Accuracy
1	.7510
2	.7464
3	.7431
4	.7562
5	.7529
Average	.7499

### Problem 2.1b

Naive Bayes Classifier (with NA values in columns removed) Results:

Trial	Test Accuracy
1	.7333
2	.7386
3	.7373
4	.7386
5	.7209
Average	.7337

Removing NA values seems to slightly decrease the overall accuracy of the naive bayes classifier.

### Problem 2.1c

Naive Bayes Classifier (using klaR library) Results:

Trial	Test Accuracy
1	.7386

2	.7516
3	.7908
4	.7712
5	.7255
Average	.7556

This classifier performs similarly to the Naive Bayes Classifier in Problem 2.1a

### Problem 2.1d

SVM classifier (using svm\_light) Results:

Trial	Test Accuracy
1	.7516
2	.8366
3	.7516
4	.7386
5	.8039
Average	.7765

The SVM classifier performs slightly better than each of the Naive Bayes Classifiers in the previous parts of the problem.

### Accuracies Graph:

