Prompt: Report the training and testing error of the Naive Bayes classifier. Discuss the results in a short paragraph.

Response: The training accuracy of my Naive Bayes classifier is 83.5% and the testing accuracy is 84.4%. This means that the training error is $1 - 0.835 = 0.165$ and the testing error is $1 - 0.844 = 0.156$. The fact that we are seeing more error on the training data set than on the testing data set leads me to believe that there must be some overfitting and that our choice of hypothesis must have led us somewhat astray. My logistic regression algorithm only had $1 - 0.894 = 0.106$ testing error–a much better performance than this week's Naive Bayes algorithm. It seems as though Naive Bayes might not have been suitable for this set–maybe there is conditional dependence between feature classes. In this case, our logistic regression algorithm is much more suitable.