**Assignment 2: Naïve Bayes algorithm for text classification.**

The goal of text classification is to identify the topic for a piece of text (news article, web-blog, etc.). Text classification has obvious utility in the age of information overload, and it has become a popular turf for applying machine learning algorithms. In this assignment, we will do the task of classifying documents using the Reuter dataset**. You will have to implement the multinomial naive Bayes algorithm to classify documents.** Naive Bayes used to be the de facto method for text classification. What's the accuracy of your learner? (*Try various smoothing parameters for the Naive Bayes learner. Which parameters work best?*)*.*