Pranay Agarwal 2008cs50220
Assignment 2 Report

3)
Accuracy on Test Set of Naïve-Bayes is – 90.4%
Accuracy on Test Set of Perceptron is – 98.1%

b)Figure of the variation of accuracy in the case of **Naïve Base** as we are changing the size of training set on x-axis

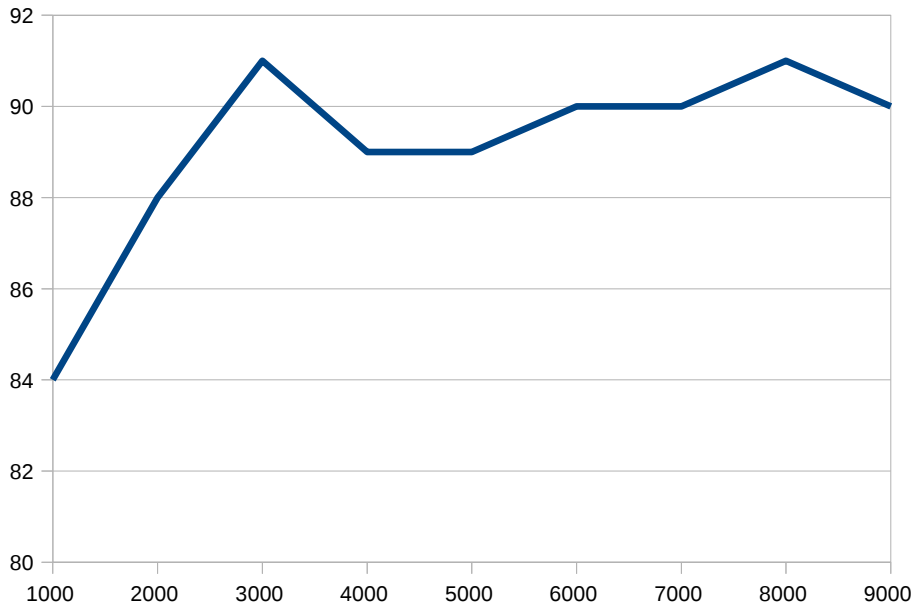
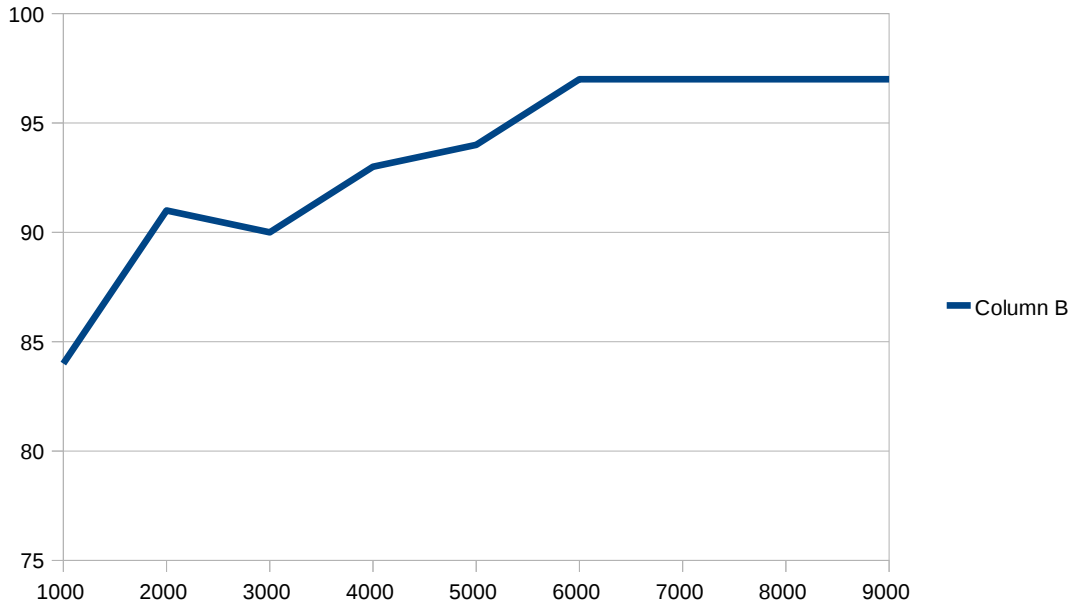


Figure of the variation of accuracy in the case of **Perceptron** as we are changing the size of training set on x-axis



3.c)
For Naïve-Bayes the most five indicative words:
'0800','msmsw04p','0600','express','head'

For Perceptron the most five indicative words
'Mailman','head','mscnx06p','0800','Within'

Note : These words change depending on the number of the training samples.

3.e)
The SVM gives the best accuracy .
Naïve-Bayes takes least time. Perceptron takes more time than SVM,
Perceptron and Naïve-Bayes all are linear classifier but SVM is maximal margin classifier ,which seems to crucial for this training set.