# ASSIGNMENT #5

**Analysis :**

**Q2 : The Naïve Bayes Classifier and Support Vector Classifier have been compared on the following basis :**

- *How does the sample size affect each classifier's performance?*

  The performance of both classifiers increases sharply as the sample size increases to a certain point , after that the fluctuation is very subtle.

- *How many samples do you think would be needed for each model for good performance?*

  From visual inspection of the graphs of f1_scores and roc_auc curves any sample size above 5000 is good for desired performance.

- *How is performance of SVM classifier compared with Naïve Bayes classifier, as the sample size increases?*

  SVM classifier outperforms the Naïve Bayes classifier as the sample size increases.