Assignment 5

Effect of sample size:

F1-macro: As number of sample increase F1 score increases but after certain number sample it almost remains same(3000 sample). In SVM model there is sudden downfall at 2500 sample. SVM is getting better F1 score the NB.

AUC: Same as F1 macro as sample size increases AUC increases but same after certain number sample it remains almost same(3000 sample)**.**

No of Samples needed:

SVM: For SVM can say that 4200 samples would be enough for good performance.

NB: For NB we can say that 4000 samples should be good enough for good performance.

Compare NB and SVM as sample size Increases:

AUC: For Auc as sample size increases there is almost similar change in both classifier.

F1: For F1 in beginning f1 score is very low of NB compared to SVM. For SVM F1 score is drastically decreasing between 2000-3000 samples. After 4000 F1 increases at almost similar rate for both classifier.