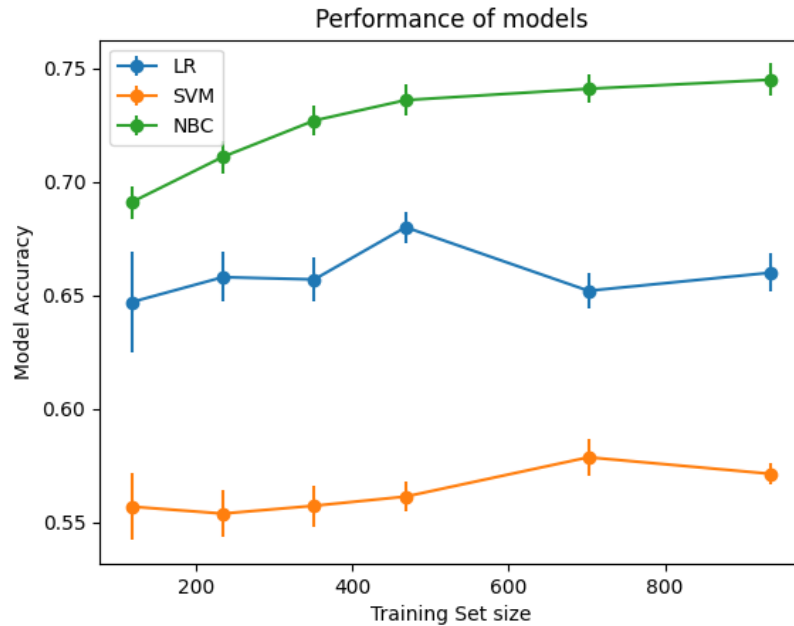




3. Plot obtained after comparing the accuracies of different models



From the observed plot, we can infer that:

1. Accuracy of Naive Bayes classifier improves with increase in the size of the training set.
  2. Logistic Regression and Linear SVM have similar performance trends but LR performs better than SVM.
4. Hypothesis formulated ( $H_1$ ) :
- LR is better than SVM

Null Hypothesis ( $H_0$ ):

LR is no better than SVM

5. As we are not given any alpha level, we assume it to be 5% i.e 0.05.

The calculated p-value is : 5.914271183792437e-06

As p-value  $\lll 0.05$ , we can reject the null hypothesis with high confidence and accept alternate hypothesis.

Thus, we conclude that LR is better than SVM