Naïve Bayes:

Accuracy:

Ham Accuracy: 96.83908045977012 (337)->No of Instances

Spam Accuracy: 90.76923076923077 (118)->No of Instances

Naïve Bayes with Stop Words:

Accuracy:

Ham Accuracy:95.6896551724138

Spam Accuracy:92.3076293076923

The reason for the decrease in the Ham Accuracy with Stop words is the number of attributes/variables have reduced so when we check for the occurrence many words will not be present in the attribute so there is a small variation in the accuracy.

Logistic Regression:LLR.java

Lamda Value-🡪0.1

Eta Value-🡪0.01

No of Iterations for convergence :1000

Accuracy🡪90.572458324782653

Logistic Regression with Stop Words:LLRstop.java

Lamda Value-🡪0.1

Eta Value-🡪0.01

No of Iterations for convergence :1000

Accuracy🡪90.15526784292431

The Accuracy has not changed much even after we have removed the stop words.