Programming Assignment 2 – Applied Machine Learning

# Results

After coding out the algorithms, we first run Logistic Regression on the simplified dataset. We obtained 100% accuracy on the test set. We then tried running the Naïve Bayes code we wrote on the simplified data set, we again obtained 100% accuracy. These results stumped us, as Prof. Natarajan told us that if you get 100% accuracy the result is wrong.

We started scanning the code for bugs, out code seemed alright, so we then we put the datasets in WEKA. Surprisingly, for Naïve Bayes, even WEKA gave 100% accuracy. However, for Logistic Regression, WEKA gave an accuracy of 94.28%.

## Confusion Matrices

Confusion matrix for Naïve Bayes algorithm with Laplace Correction.

Model

|  |  |  |
| --- | --- | --- |
|  | 1 | 0 |
| 1 | 14 | 0 |
| 0 | 2 | 19 |