**BİL 454 Data Mining**

**Assignment 3**

**Due date:** 19.05.2015

Your assignment is composed of three steps:

1-You have to implement a Naive Bayes classifier C1 using JAVA. You will not use any API or any code from internet. You may use a dataset with categorical data.

2- Import Weka to your JAVA code. Using the Naive Bayes (C2) and decision tree (C3) classifiers of Weka, compare your implementation results of C1 with the results of C2 and C3 using the evaluation metrics precision and recall. Use cross validation for testing.

3- Draw ROC curves for the three classifiers (the classifier you implemented and the two clasifiers of Weka). You can’t use any code or API that draws a ROC curve. You may use an API to draw graphics. Which classifier is better? Discuss your results.