

Data mining in the field of computer science is an answered prayer to the demand of this digital age. It is used to unravel hidden information from large volumes of data usually kept in data repositories to help improve management decision making. Classification is an essential task in data mining which is used to predict unknown class labels. It has been applied in the classification of different types of data. There are different techniques that can be applied in building a classification model. In this study the performance of these techniques such as J48 which is a type of decision tree classifier, Naïve Bayesian is a classifier that applies probability functions and ZeroR is a rule induction classifier are used. These classifiers are tested using real crime data collected from Nigeria Prisons Service. The metrics used to measure the performance of each classifier include accuracy, time, True Positive Rate (TP) Rate, False Positive (FP) Rate, Kappa Statistic, Precision and Recall. The study showed that the J48 classifier has the highest accuracy compared to other two classifiers in consideration. Choosing the right classifier for data mining task will help increase the mining accuracy