**Project Summary**

A predictive model was built from the mobile price range dataset to predict the range of a mobile phone based on different features. The model was built using different algorithms such as linear regression, random forest, decision trees, XG boost and KNN. The performance parameters of these model were closely checked in order to figure out the best model for the mobile price range prediction. KNN seemed to be the predict the price range more closely than the other algorithms for all the classes as the performance parameters for the KNN were the most consistent than other algorithms. Also, XG boost seemed to overfit the data. Different features like Battery power, clock speed, dual sim, mobile depth, mobile weight, pixel height, pixel width, ram, secondary camera, talk time got linear relationship with our dependent variable price range. It was seen that ram has the highest impact on the price of the mobile. Surprisingly, Linear regression performed well in this classification problem. But there was heteroscedasticity present, hence non-linear models were preferred than the linear ones. Using decision tree, decent performance was gained after tuning the hyperparameters. It was also found that there's some overfitting which is a usual problem with the decision tree. Also, different bagging and boosting models were tested which performed well as compared to the above models. The XG boost model was also getting overfitted. The KNN model performed the best and most consistently while predicting the different classes of the output. Hence, it was concluded that the KNN model was the best among all.