Q1) Decision Tree

Classify the given dataset (attached) using the Decision Tree Classifier. You need to classify this on different depths (at least 5) of the decision tree and plot the accuracy vs depth graph. This accuracy plot will be made for training data as well as for the testing data. For training data, use cross-validation to compute the accuracy. (Take the average of 5 accuracies if you use 5 fold cross-validation. Find the optimal decision tree).

Q2) Decision Boundary

Classify the dataset (same dataset) using

a. Naive Bayes Classifier

b. KNN Classifier

c. Decision Tree Classifier

For each classifier, you need to draw a decision boundary and show the classification over the graph. To reiterate, please choose the optimal classifier for the decision tree