Lab Exam Findings

Name: Qasim Khan
CMSID: 49375
Department: CE

Lab Exam Findings:

Accuracy on test: 0.805

F1-score on test set: 0.681

Cross-validation scores: [0.72727273 0.77922078 0.79220779 0.74025974 0.72727273 0.80519481

Mean= 0.73

The lab exam's code is using a Random Forest classifier to predict diabetes. The code then uses the model to predict the labels for the test data and calculates the accuracy and F1 score of the predictions. The output shows that the accuracy on the test data is 0.805 and the F1-score on the test set is 0.681.

The code then performs 10-fold cross-validation on the model and calculates the cross-validation scores based on F1 score. The output shows the scores for each fold, which ranges between 0.72 and 0.8 and the mean of the cross-validation scores which is **0.73.**

In conclusion, the code is using a Random Forest classifier to predict diabetes and the model has an overall accuracy of 0.805 and F1-score of 0.681 on the test data, and an overall accuracy of 0.73 on unseen data. The mean accuracy of the cross-validation is **0.73.**