Zaid Abujumaiza
Professor Basu Roy
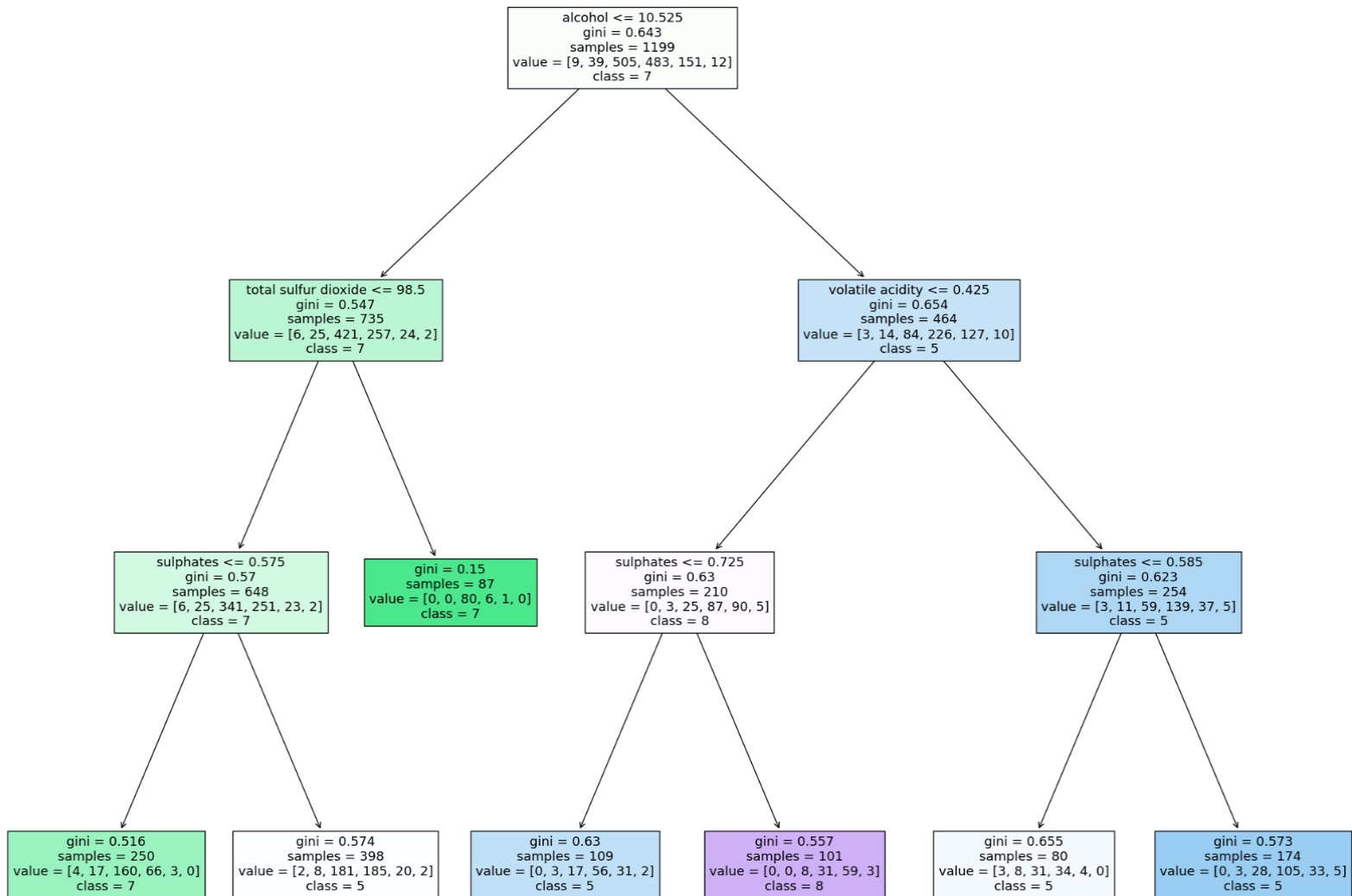CS 301-003
11/8/2022

QUESTION 1:

QUESTION 2:

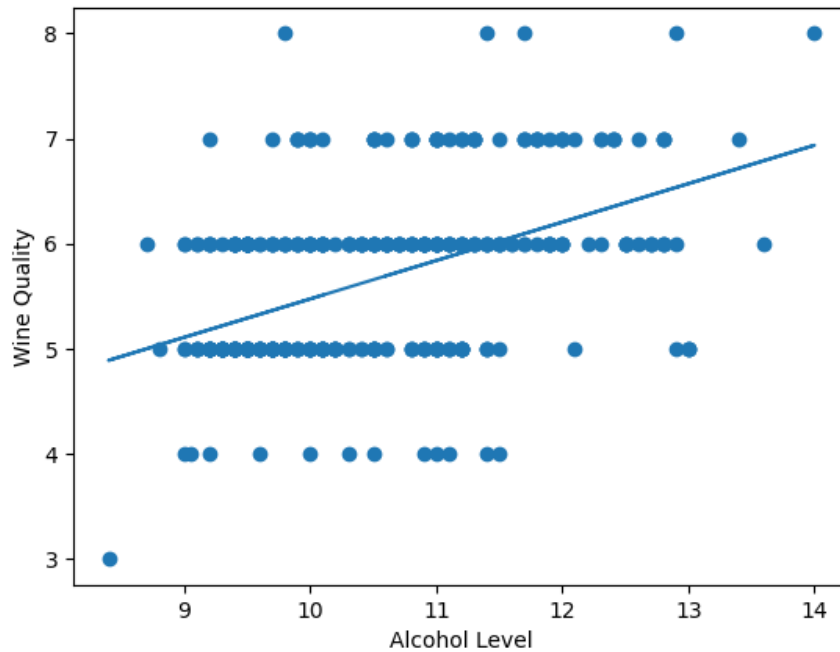**10 cross-validation score**: 0.5196187106918239
Accuracy: 0.555
Precision: 0.7651304141296368
Recall: 0.25352924405343763
F1: 0.24759983695940582

QUESTION 3:

Linear Regression Coefficient: 0.2925100773413656

QUESTION 4:

Mean Squared Error: 0.5634260639791545

The linear regression model which uses Alcohol to predict wine quality is the best because it has the largest R^2 value and smallest mean squared error value. There is a slight positive correlation between alcohol and wine quality.