Student Analysis

Data Description:

* RID (first column): This column contains the serial numbers of data.
* AGE (second column): This column contains the corresponding persons age pattern.
* Income (third column): This contains the 3 levels called as high, low, medium.
* Student (fourth column): It contains the student or not.
* Credit rating (fifth column): Whether he/she having their credit is fair or excellent.
* Class: buy computer (sixth column): He/she will buy computer or not.

Data Analysis:

* By importing our functions are numpy as np, pandas as pd, from sklearn we are importing Decision tree classifier, train\_test\_split, confusion\_matrix and accuracy score.
* Reading the data csv into jupitor.
* Finding the datatypes, info, shape and columns.
* By taking test size and random size we are getting test and train data.
* Now, taking an object called dtree for the Decision tree classifier and predictions and accuracy score.
* Also we are finding the auc and roc score and accuracy score for our data.
* Plotting between the False position ratio and true positive ratio at location best with the auc1 and the sensitivity.
* Again plotting with the False positioning ratio with Receiver operating characteristic with the location best auc1 and auc2 and the sensitivity.