1. The best classifier for this data is random forest classifier and it gives an accuracy of 83.41% (based on mean classification accuracy of 5 models as created using k-fold cross-validation for k = 5)
2. Att24 seems to be the most important feature in classifying the data as the decision tree does first split based on this dimension.
3. If two out of three nearest neighbors of a point have class 2, then we can say with 80% surety that point will also have class 2. (Explanation – the k-NN classifier uses k = 3. So all the points that it assigns the label of 2 must be having at least 2 out of its 3 nearest neighbors with label 2. The classifier assigns label2 to 85 points. Out of 85 points, 68 have label 2. So, we can say that if classifier assigns a point a label2, there are 68/85 = 80% chances that it has a label of 2.)
4. While using random forest classifier, A point with label 2 is more likely to be predicted as a point with label 2 compared to the chances of a point with label 1 to be predicted as a point with label 1. A point with label 1 is more likely to be predicted correctly than a point with label 2. This is due to class-imbalance. Prediction accuracy for label 2 is 98%, for label 1 is, 84% and for label 0 is, 60%.