Subject: 22AIE213

Lab Session: 08

Notes:

1. Please read the assignment notes carefully and comply to the guidelines provided.
2. Code should be checked into GitHub and the report to TurnItIn. Main Section (Mandatory):

Please use the data associated with your own project.

Ref: Please refer to your notes on Entropy, information gain and Decision Tree.

A1. Write your own module for detecting the feature / attribute for the root note of a Decision Tree. Use Information gain as the impurity measure for identifying the root node. Assume that the features are categorical or could be converted to categorical by binning.

A2. If the feature is continuous valued for A1, use equal width or frequency binning for converting the attribute to categorical valued. The binning type should be a parameter to the function built for binning. Write your own function for the binning task. The number of bins to be created should also be passed as a parameter to the function. Use function overloading to allow for usage of default parameters if no parameters are passed.

A3. Expand the above functions to built your own Decision Tree module.

Report Assignment:

Please update your last week's report in IEEE format. Expand the methodology and results sections with outcomes of this experiments & results obtained. Please discuss your observations, inferences in results & discussion section. Please conclude the report appropriately with these experiments. Consider following points for observation analysis & inferences.