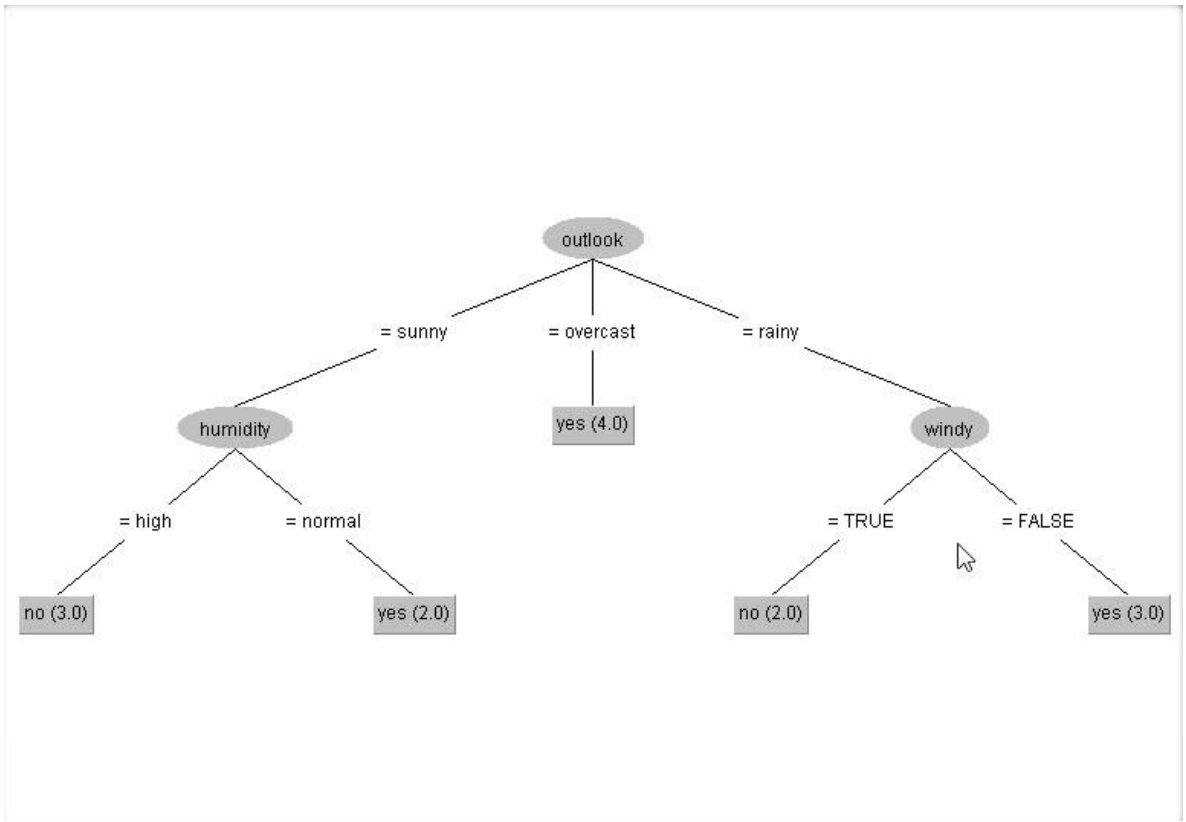
- Explain the advantages and disadvantages of writing a program on your own vs using a pre-created suite such as WEKA
- ○ Faster problem solver without the need of an implementation
- ○ Multiple users can use it easier
- ○ Global instructions
- ○ Existing accepted tools
- ○ Tested by many users
- ○ Better memory management
- ○ Multiple algorithms
- ○ Graphical interface
    - Better management of difficult datasets
    - Approximation when the data cannot reach a pure form

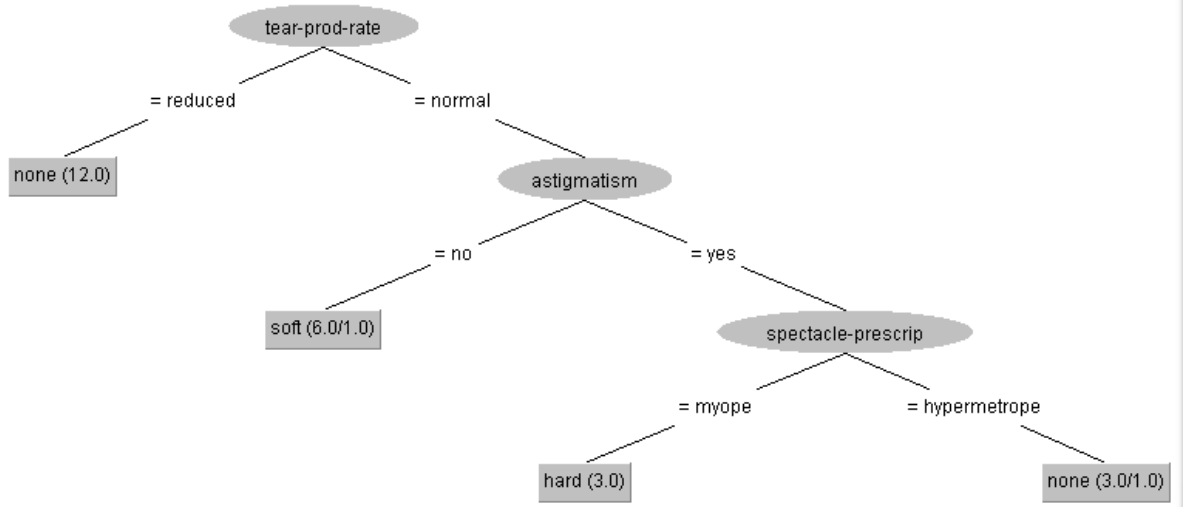
- Explain what criteria you followed to choose the datasets for your tree and the WEKA tests.
    - The main objective is to create pure datasets for decision making, so the program is based on checking different node splits to achieve that objective, the program uses tools such as information gain and entropy; WEKA uses a similar algorithm but improved; it can use multiple algorithms depending on the type of data being analyzed.

- Include the graphics of the trees or part of the trees you generated in WEKA and your own program. Are they different, and if so, why? ○ They can be different base on the different algorithms WEKA can manage, the bases are the same but WEKA is tested and optimized and in some cases where the data set in not clear WEKA was tools to manage the information; our program is simple, it cannot compare with the tools WEKA was.

- Based in what you have learned so far where would you use decision trees?
    - Every model that needs predictions or events that require information analytics in order to backtrack information and analyze possible events to create better future predictions, this is a tool used by banks to predict credit card frauds, weather predictions and can be used in social behavior experiments trying to predict the patterns of society. This tool allows simple information management with a great relation between datasets analysis. Anything that should need a prediction based on events or information or the analysis of previous data can use this analytic method.

Weka


outlook
= sunny
= overcast
= rainy
humidity
yes (4.0)
windy
= high
= normal
= TRUE
= FALSE
no (3.0)
yes (2.0)
no (2.0)
yes (3.0)


tear-prod-rate
= reduced
= normal
none (12.0)
astigmatism
= no
= yes
soft (6.0/1.0)
spectacle-prescrip
= myope
= hypermetrope
hard (3.0)
none (3.0/1.0)