Kyungjin Cho

Stat443

Homework #1 Extra Writing

**Purpose:**

The goal of this homework was to get used to the guide, and create a tree diagram with the program.

**Analysis:**

**Summary table:**

Text, letter

Description automatically generated

This table shows what is in a classout.txt. According to this file, there are total of 5735 records of patients. Among those 5735, there were 3443 datasets that contained one or more missing values.

**Some trivial analysis:**

I have found some data analysis through this classout.txt.



This line shows that the smallest node size in this data is 57.

A picture containing text, receipt

Description automatically generated

This analysis shows that if we were to create the largest tree diagram, it will contain 72 possible nodes.

**Classification tree:**

A picture containing map

Description automatically generated

This is a final classification tree diagram. If the person’s mean blood pressure Day1 is less than or equal to OR the value does not exist, you would move to down left (to 4). \* after the less than equal to sign means that the value missing. If there are no \* value next to the scale function, you would want to go right down since that means that the value is not satisfied.

Therefore, if you want to predict the person with a person who has 60 mean blood pressure in day 1 and has 200 PaO2, they have 0.70% of benefiting from cardiac function by right heart catherization (RHC).