Week 5 - Check Your Understanding

1. Decision tree can only be used for categorical response

   a. True
   b. False

2. The prediction of a regression tree (quantitative response) are the mean of the response values of the observations in the associated node.

   a. True
   b. False

3. The prediction of a classification tree (qualitative response) are the majority of the response values of the observations in the associated node.

   a. True
   b. False

4. Gini-Index is the only way to measure the impurity of a node in decision trees.

   a. True
   b. False

5. Decision Trees split using Gini-Index are similar to trees split using entropy.

   a. True
   b. False

6. Deeper/larger trees will have a higher training accuracy than the shallower trees.

   a. True
   b. False

7. One wants to build a decision tree to detect if a patient has lung cancer. One should use

   a. Classification Tree
   b. Regression Tree

8. One wants to build a decision tree to predict salary. One should use

   a. Classification Tree
   b. Regression Tree

9. Decision trees can achieve zeros training errors for any given data.

   a. True
   b. False