1. For the first node, we construct it with all the examples we have

2. Compute the Gini impurity of the dataset of the current node, we can also use Shannon entropy to denote the impurity of our dataset.

3. Partition the datasets into two subset as positive rows and negative rows

4. Calculate the Gini impurity of the subset and the impurity gain from the parent node

5. Repeat steps 4 and 5, find the best question that have the biggest impurity gain

6. Separate the dataset to two subsets using the question found in step 5

7. Continue divide until we have the pure leaf node

The Random Forest Classifier consist of many decision trees, each tree is trained using a subset of whole samples (maybe overlapped). When doing a classification, each tree generates a result. The final result is obtained by voting all the results generated from the forest. The Random Forest Tree Classifier is proved to reduce the impact of overfitting.