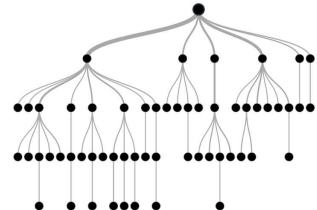
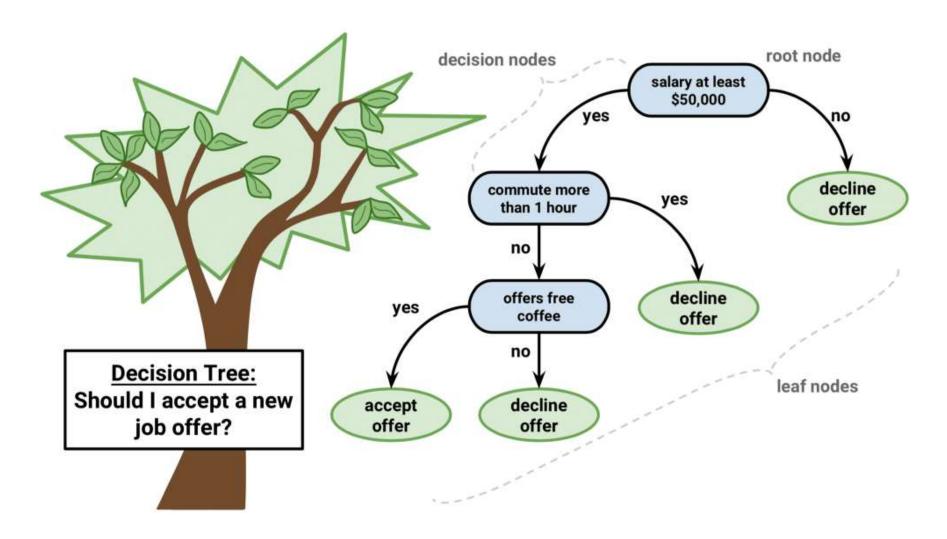
## Decision tree

#### Decision tree

- Decision tree is a type of supervised learning algorithm that is mostly used in classification problems.
- Decision tress often mimic the human level thinking so its so simple to understand the data and make some good interpretations.

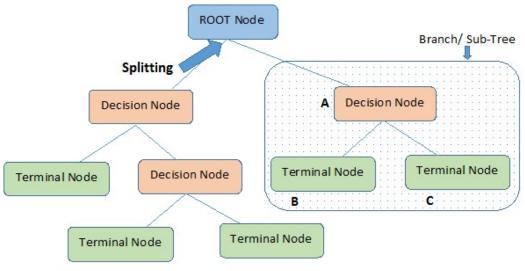


## Decision tree



## Important Terminology

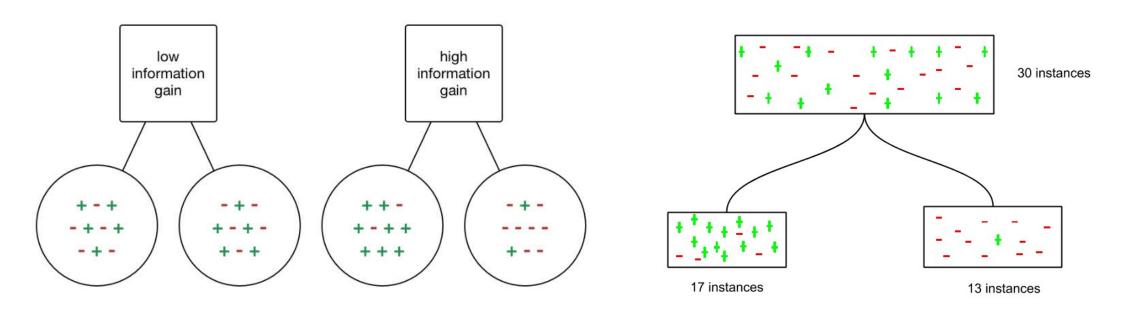
- Root Node: It represents entire population or sample
- Splitting: It is a process of dividing a node into two or more sub-nodes.
- Decision Node: When a sub-node splits into further sub-nodes, then it is called decision node.
- Leaf/ Terminal Node: Nodes do not split is called Leaf or Terminal node.



Note:- A is parent node of B and C.

## Information Gain

• We need to split the data in table using the input variable that gives maximum information gain.



# Thanks