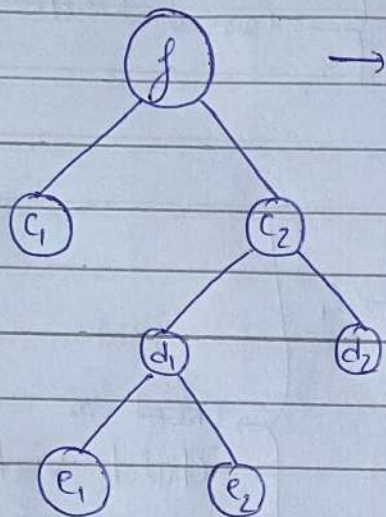


## Post pruning and Prepruning

→ Decision Tree is more prone to overfitting.



→ Overfitted  
because when decision tree is build without any parameters, it learn training data till every leaf node. Hence, accuracy decreases on test data.

Note: To prevent overfitting in decision tree, we do pruning.

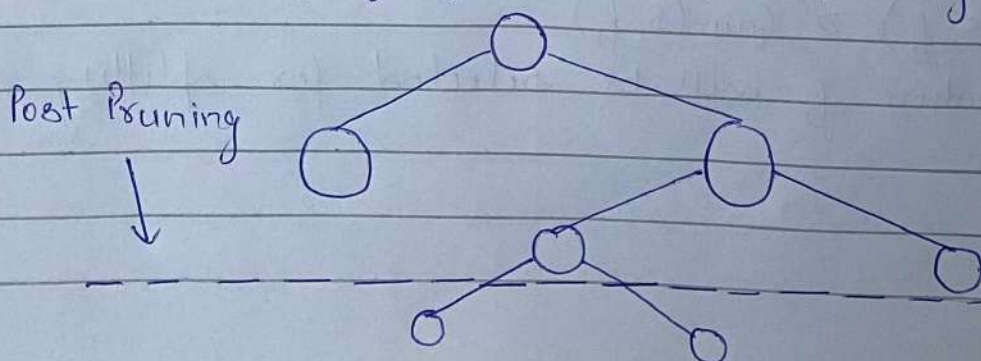
\* Pruning :

The process of removing sub-nodes/child nodes of a decision node/parent node is called pruning. There are two types of pruning.

- (i) Post Pruning
- (ii) Pre Pruning

→ Post Pruning :

Removing sub-nodes of a decision node after tree has fully grown is post pruning.



→ Pre Pruning :

Removing of sub-nodes of decision nodes while building the decision tree with the help of parameters is called pre pruning.

