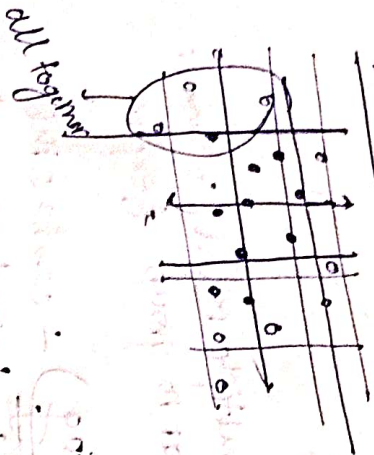
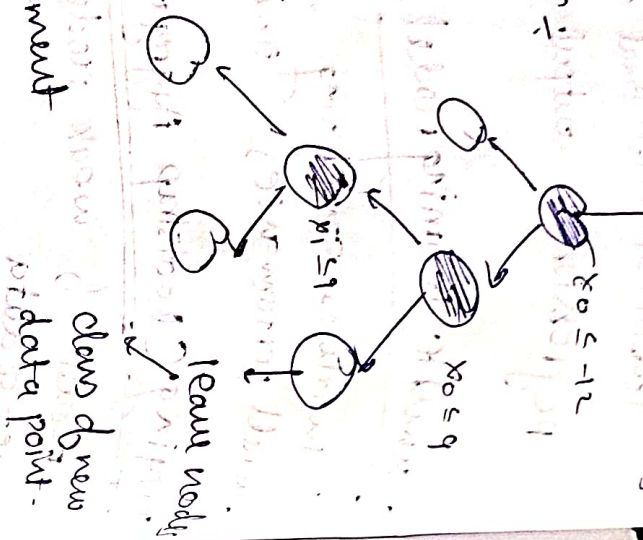


Decision tree 1

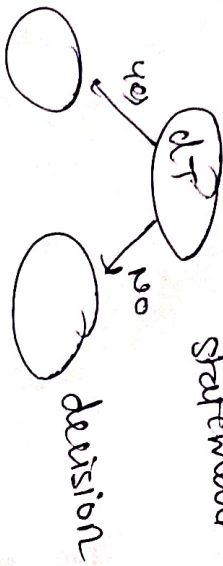
Decision tree classifier:



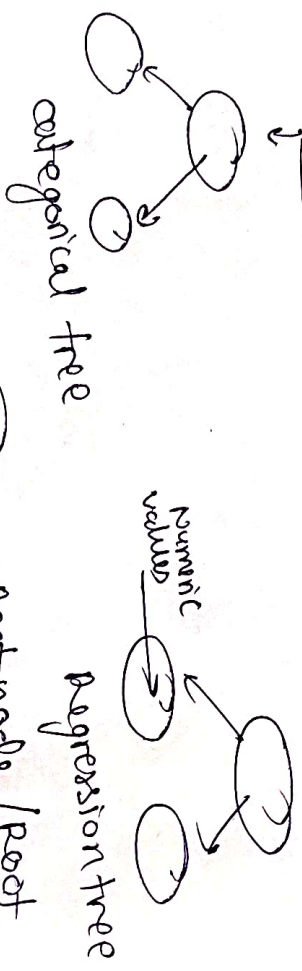
decision nodes



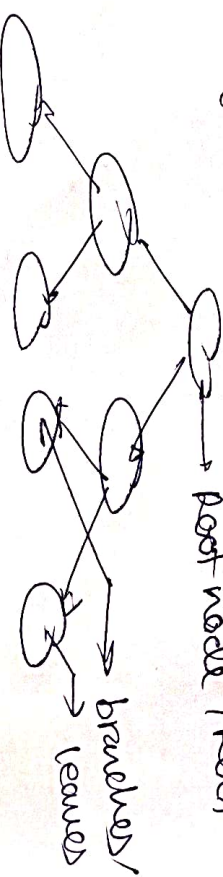
class of new data point



statement



categorical tree



Gini Impurity is measure of how "pure" a node is. In context of decision tree, the purity of a node refer to whether the sample if node is pure $\rightarrow \text{imp} = 0$

$$Gini = 1 - \sum_{i=1}^c p_i^2$$