

KNN

SVM

Linear regression
logistic regression

Bagging vs Random Forest

Although, Random Forest is implemented using Bagging.

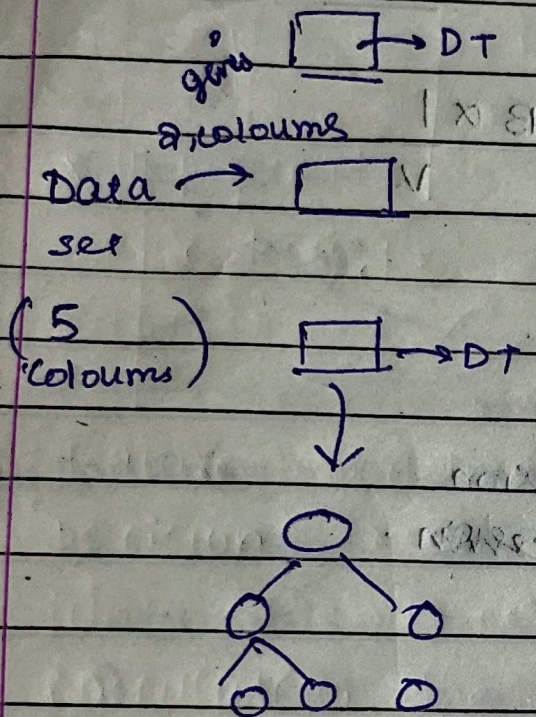
*** Bagging is a general technique where we use any algorithm.
In Random Forest, we have to use only decision tree as base algorithm.

What if we use Bagging classifier and give every model's base algo as random forest? as decision tree? Will it be different?

It is not different w.r.t to feature sampling. (Bagging and Random Forest) its different.

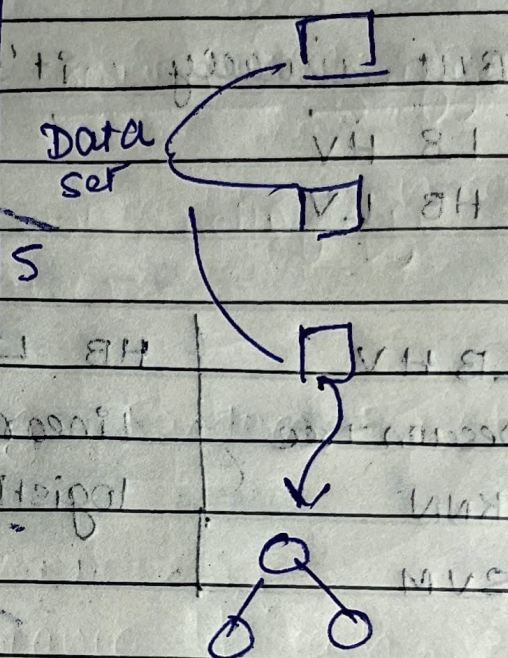
Base-estimator \rightarrow choose any algo to use in model.

column sampling in Bagging



when sampling occurs, and out of 5 we give 2 columns to the model. It will make decision tree based on the 2 columns only.

column sampling in Random Forest



for every node sampling happens. Every model's ^{node} will get any 2 columns.

Tree level

Node level

Random Forest's performance better.

Random Forest Hyperparameters

Random Forest Hyperparameters
 → parameters