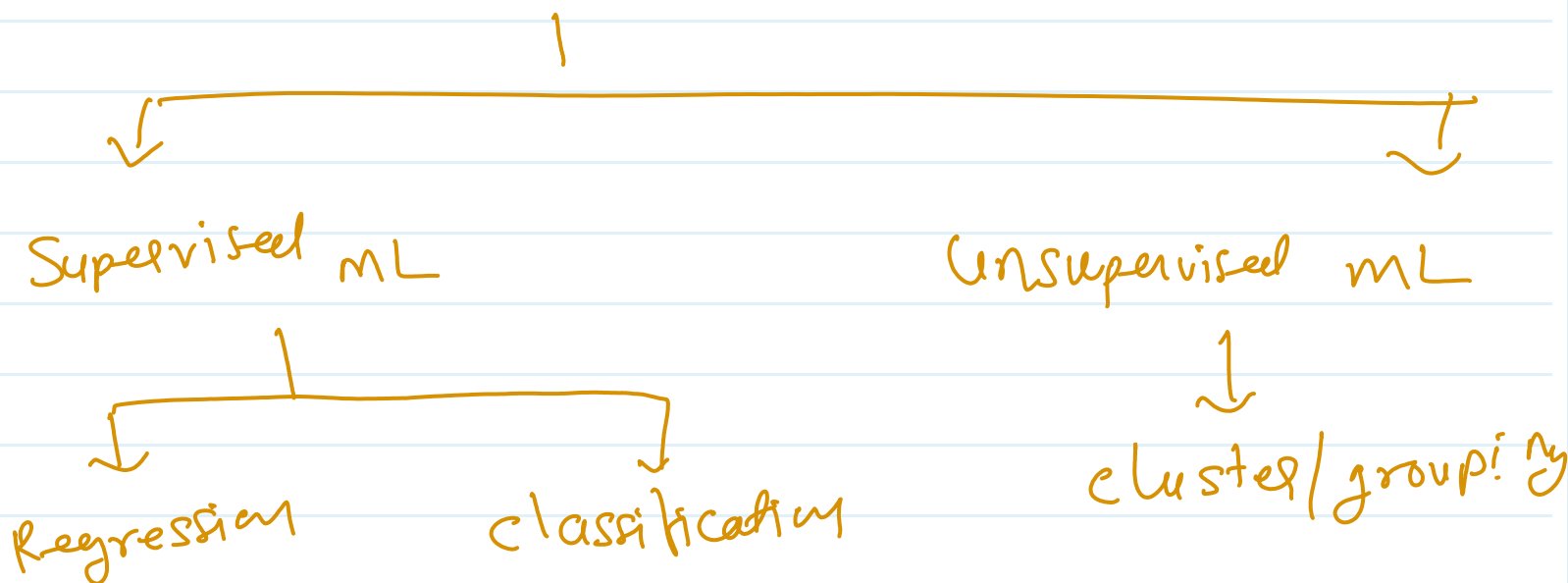


## Machine Learning



# \* Regression

result - continuous variable

[Decimal] cm - 1cm  
2.5cm  
1.11cm  
0.7cm

- ① Linear Regression
- ② Lasso Regression
- ③ Ridge Regression
- ④ Elasticnet Regression
- ⑤ Support vector Regression
- ⑥ Decision Tree Regression
- ⑦ Random forest Regression
- ⑧ Gradient boost Regression
- ⑨ Ada boost Regression
- ⑩ XG. boost Regression

## ⑪ KNN Regression

### \* classification

Discrete variable -  $[T/F, P/F, M/F/T]$   
 $[10^{th}/12^{th}/\text{Grad}/PG/PhD]$

- ① Logistic Regression
- ② Support vector classification
- ③ Decision Tree classi
- ④ Random forest class.
- ⑤ Ada boost class.
- ⑥ Gradient boost class.
- ⑦ XG boost class.
- ⑧ K-nearest neighbor class.

# \* UnSupervised learning.

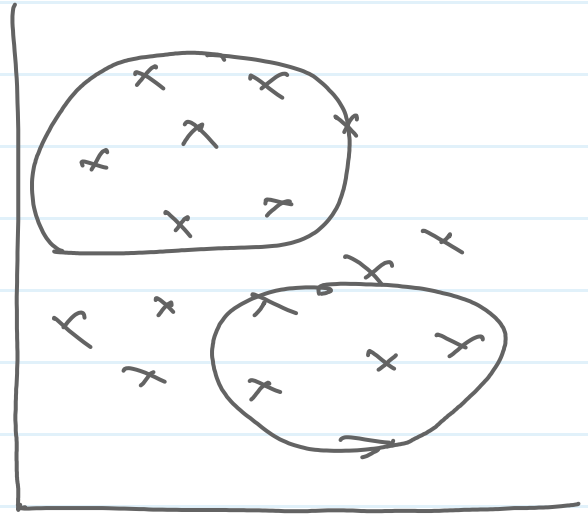
## cluster / Group

① K mean

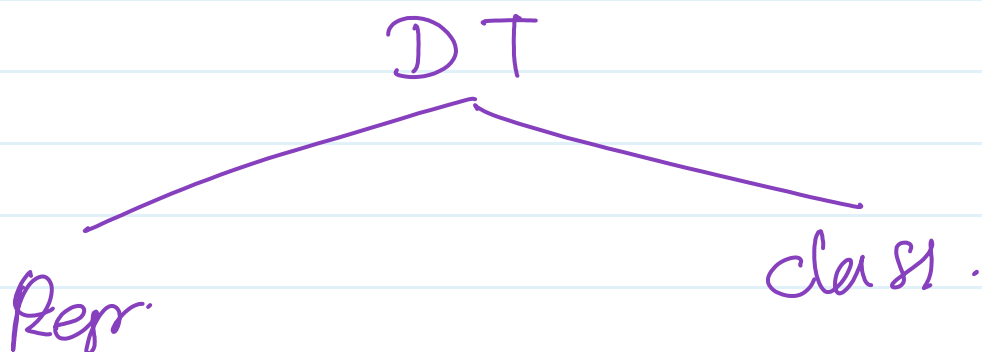
② K mean ++

③ DB Scane

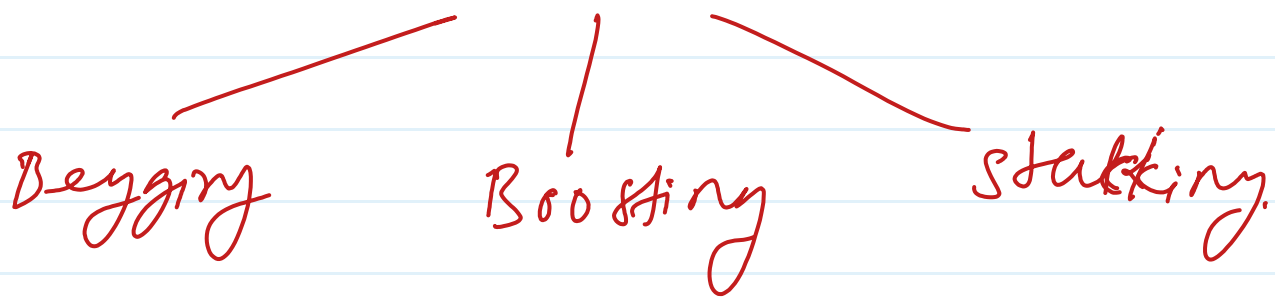
④ Hierarchical clustering.



## SVM - Support vector machine



# Ensemble Technique.



Bagging  $\Rightarrow$  RF



Boosting

Ada / Gradient / Extreme Gradient  
boost



k nearest neighbor



Task

RLC }  
— L }  
— L }

evaluate



hyperparameter tuning.



Trans