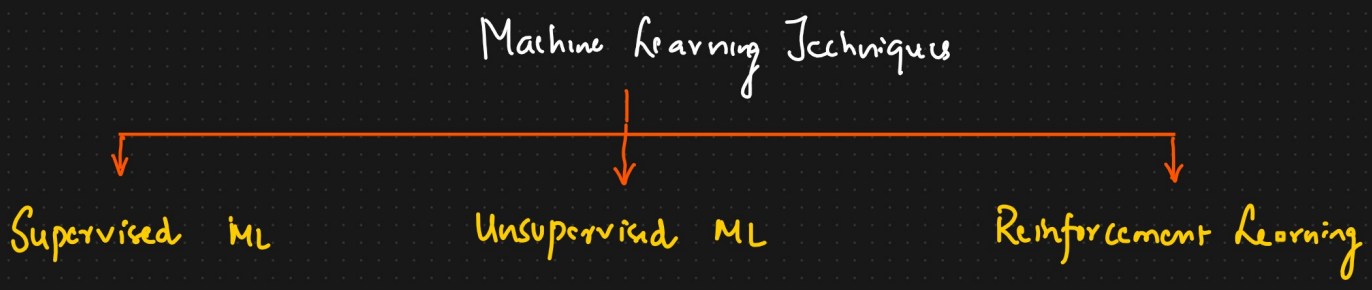
3 Types of Machine Learning.



Supervised ML Technique

- Regression ✓
- Classification ✓

Predict House price

Dataset

Size of House	# of Rooms	Price
5000	5	450K
6000	6	500K
—	—	—
—	—	—

Independent feature

Dependent or o/p feature

Price → Continuous

① Dependent or o/p feature
② Continuous → Regression
③ Categorical → Classification

Classification

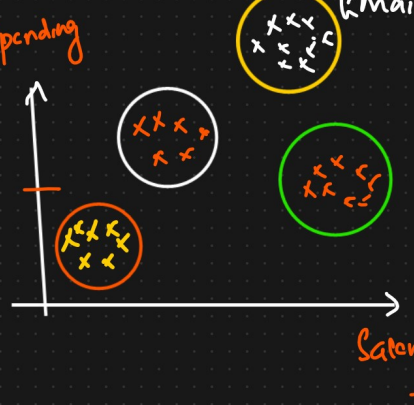
No. of study hours	No. of play hours	Pass/Fail ↓ Dependent Feature
7	3	Pass
2	6	Fail

Pass / Fail → Binary classification OR Multiclass classification

May Be

② Unsupervised ML ÷ Eg: Customer Segmentation → Clusters

Salary	Spending Score (1-10)
20000	9
45000	2
—	—
—	—
—	—



Ecommerce Company

⇓

Email with some discount to

Supervised ML

① Linear Regression
② Ridge & Lasso
③ ElasticNet
④ Logistic Regression (Classification)
⑤ Decision Tree
⑥ RandomForest
⑦ AdaBoost
⑧ Xgboost

} Both Classification & Regression

Unsupervised ML

① K Means
② Hierarchel Mean
③ DBScan clustering

Reinforcement learning