

Types of ML

- ① Supervised ML
- ② Unsupervised ML
- ③ Semi Supervised ML
- ④ Reinforcement

① Supervised ML → CLASSIFICATION
→ REGRESSION

Dataset → Specific o/p → Model → o/p

CLASSIFICATION

Independent features

<u>Play hours</u>	<u>Study hours</u>
8	2
7	3
3	6

o/p feature → dependent feature

Pass/Fail ⇒ Categorical feature

Fail

Fail

Pass

Regression : o/p ⇒ continuous

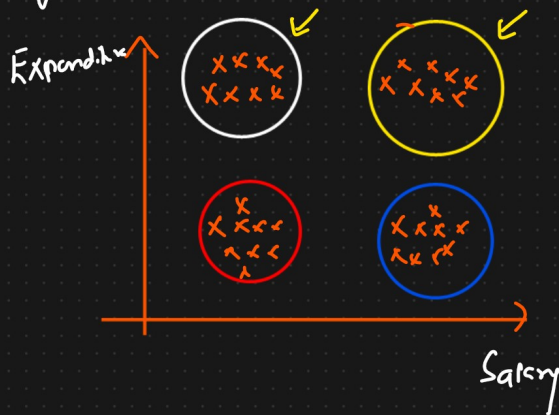
Size of House

No. of Room

Price ^{o/p} ⇒ continuous

② Unsupervised ML : Dataset \rightarrow Clusters or Similar groups

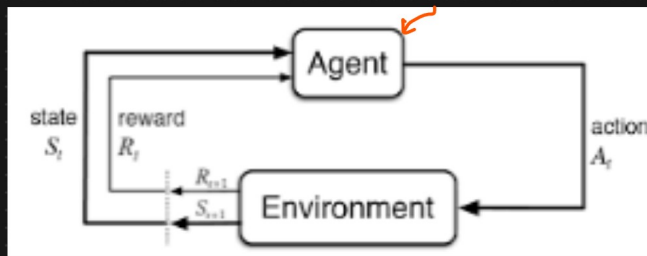
Eg: Customer Segmentation No o/p



Product \rightarrow clusters
 \downarrow
Target the audience
 \Downarrow
20% Discount

③ Semi Supervised : Supervised + Unsupervised

④ Reinforcement Learning :



Reinforcement learning is an area of machine learning concerned with how intelligent agents ought to take actions in an environment in order to maximize the notion of cumulative reward. Reinforcement learning is one of three basic machine learning paradigms, alongside supervised learning and unsupervised learning.

