

Supervised, Unsupervised, Semi-Supervised, Reinforcement Learning

Types of ML

- ① Supervised ML → CLASSIFICATION
→ REGRESSION
- ② Unsupervised ML
- ③ Semi Supervised
- ④ Reinforcement Learning

- ① Supervised ML → Classification
→ Regression

① Dataset → O/p feature of the Dataset

CLASSIFICATION

↓ o/p features → Dependent feature

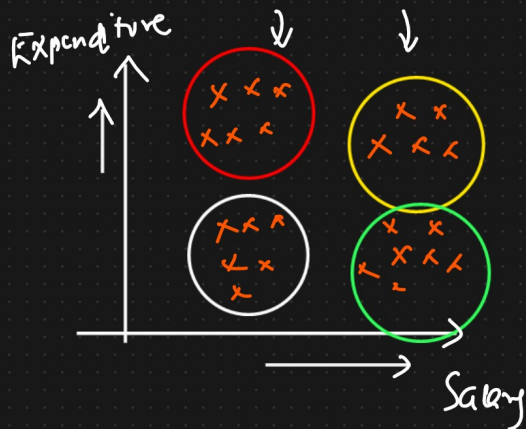
No. of hours played	No. of study hours	<u>Pass/Fail</u>
8	2	Fail
7	3	Fail
6	4	Fail
5	5	Pass
4	6	Pass

Regression → O/p → Continuous value

Size of house No. of Room ^{↑ O/p} Price of the House ⇒ Continuous value

② Unsupervised ML → No O/p ⇒ Clusters → Group of Similar DATA

Eg: Customer Segmentation

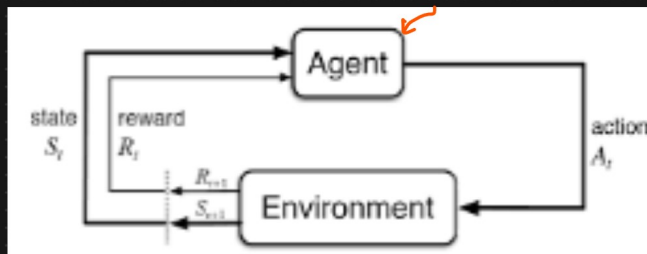


Salary Expenditure

MALL → Watches → Discount + Coupon

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.

