

Introduction to Machine Learning Algorithm-

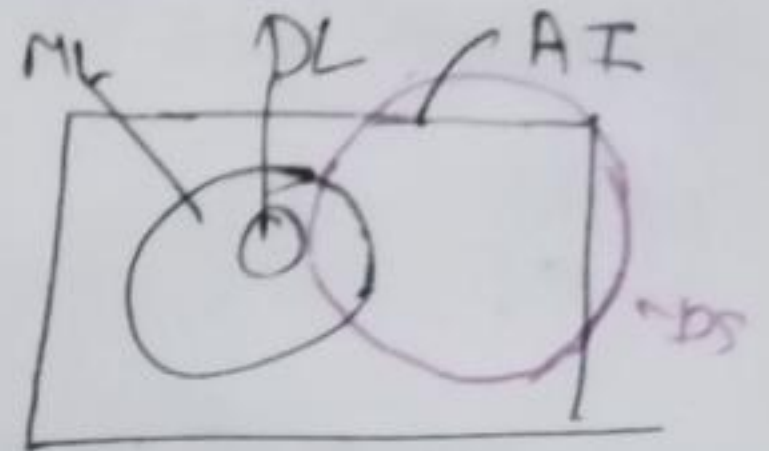
① AI VS ML VS DL VS DS.

AI - It can do its task without any human intervention
ex - Netflix, Self Driving Car, Amazon.

ML - smart tool analyze, visualize forecast, prediction

DL - To Mimic human Brain
Multi layered Neural Network

DS - where play multiple role.



ML and DL.

Supervised ML - A machine learning method where the model is trained on labeled data (input + correct o/p) to learn pattern and predict output for new data.

Independent feature

Dependent feature

Age

Weight. \rightarrow o/p feature

=

New Age

Hypothesis \rightarrow Prediction
SS \rightarrow Weight

types -

Classification - Predict categorical.

Regression - Predict Numbers.

No. of study

No. of play hr

No. of sleep

O/P Pass or Fail

Pass / Fail

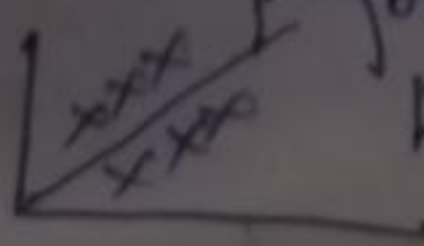
Binary Classification

eg - Location House Price

O/P Price

Continuous

Regression
Linear Regression



ML Algorithm

① Regression

Linear Reg.

Lasso & Ridge.

Decision Tree Reg.

Random forest Reg.

Xg boost

ANN

RNN

Classification

Logistic

Same as above.

ANN, CNN

unsupervised learning — ML method using unlabeled data to find hidden pattern or grouping without predefined output.

Clustering

Association

- grouping

finding Relation.

Algo — KMean, DBSCAN.