ML:

ML is a branch of computer science which has several learning algm which learns from past data & makes prediction.

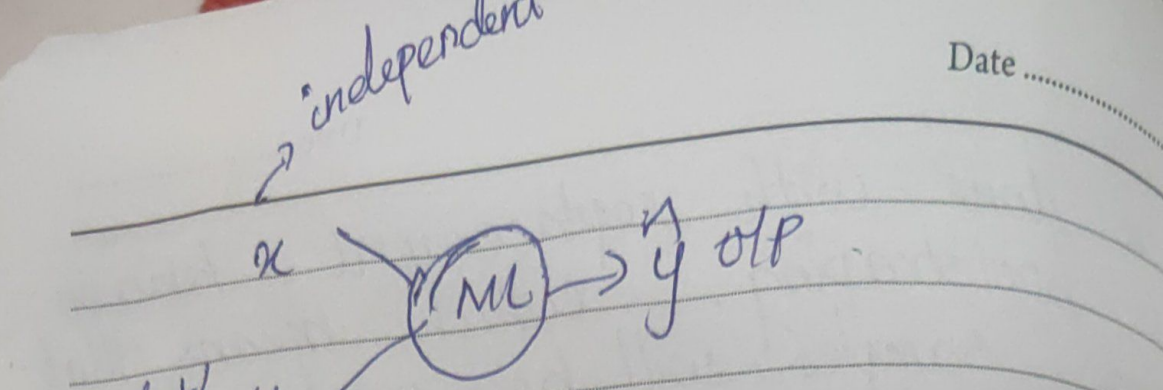
Types:-

1. Supervised ML
2. Unsupervised ML
3. Reinforcement ML
4. Semi supervised ML

Supervised ML

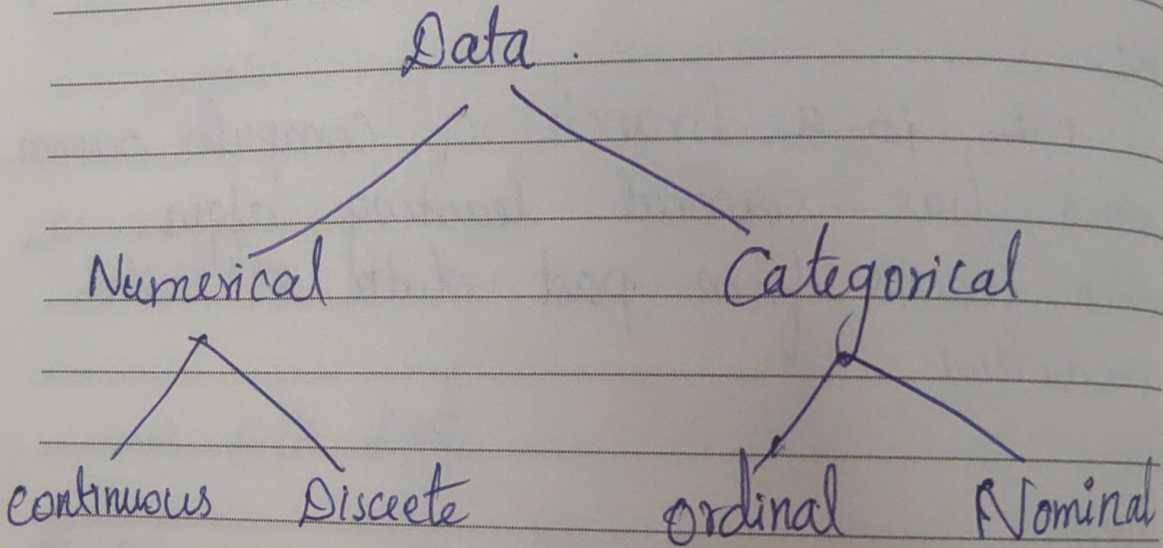
If we train ml model with both input & output variable.

Date .....



Types of Supervised Learning.

1. Regression.
2. classification.



Regression:-

Regression algm are used when target variable is continuous.

eg: House price dataset.

Date .....

Types:-

1. Linear Regression
2. Time series Forecasting
3. KNN Regression
4. SVM Regressor.
5. Decision Tree Regressor
6. XG Boost Regressor
7. Gradient Descent Regressor
8. Random Forest Regressor.

Classification

classification algms are used when target variable is categorical or discrete.

Eg:- Diabetics datasets.

↓(Y will be Yes / NO.)

Types:

1. Logistic
2. KNN
3. SVM
4. Naive Baye's
5. DT
6. Random Forest
7. XG Boost
8. Gradient Boosting
9. Bagging.

Ex:

Date .....

① Flight price prediction

Target → price → Regression.

② covid 19 prediction

Target ⇄ Positive → classification
Neg

③ Loan amount prediction.

Amount → Regression

④ Cancer dataset → classification.

⑤ Iris dataset → classification

⑥ Email classification → classification ⇄ spam / not spam

⑦ Sales prediction → Regression