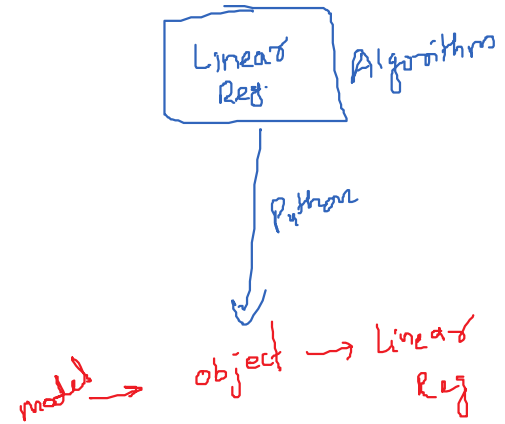


# Machine Learning

27 April 2022 14:28

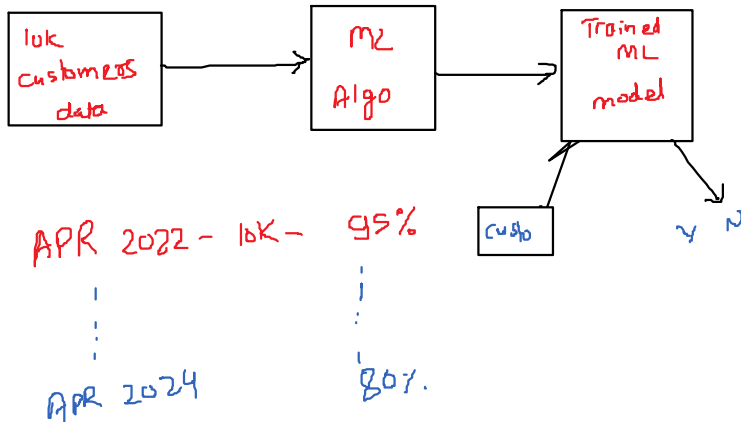
## Supervised Machine Learning

- All the tasks of predictions, recognitions can be solved with supervised ML
- Supervised ml techniques always need labelled business data to train the model.
- All the supervised models when trained do not memorize the training data (except few r.g. KNN) , they don't store the training data, the supervised models learn patterns from the data. These models store the patterns in the form of some equations/rules/hypothesis. These learnings are exported as object file upon completion of the training process. Those object files(pickle - pkl file, h5 file) can be then loaded in any production environment.
- Supervised learning algorithms when deployed to production, they only make predictions in production. These models do not learn in production (no exception). Supervised Models stay static in production.



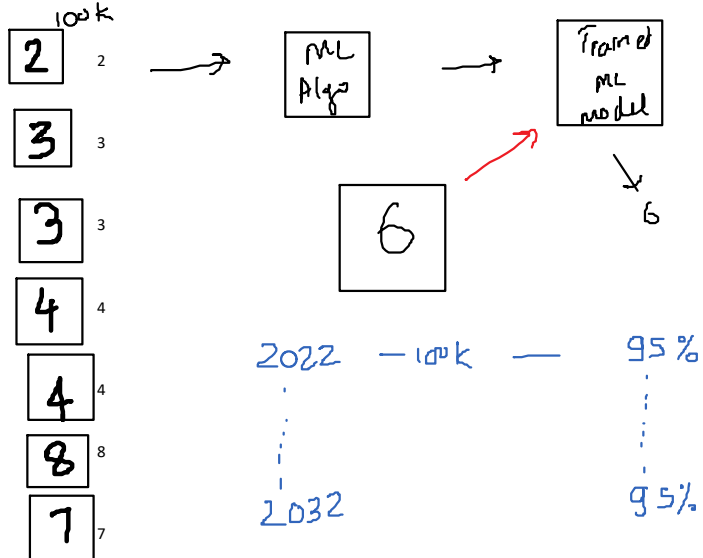
### Case 1: Bank customer churn prediction

Objective: to build an ML model which can be used to predict whether the customer will leave or not.



### Case 2: AVNPR - automated vehicle number plate recognition

Objective: to build an ML model which can be used to recognize digits from given image, so that it can be used for AVNPR



Clustering

