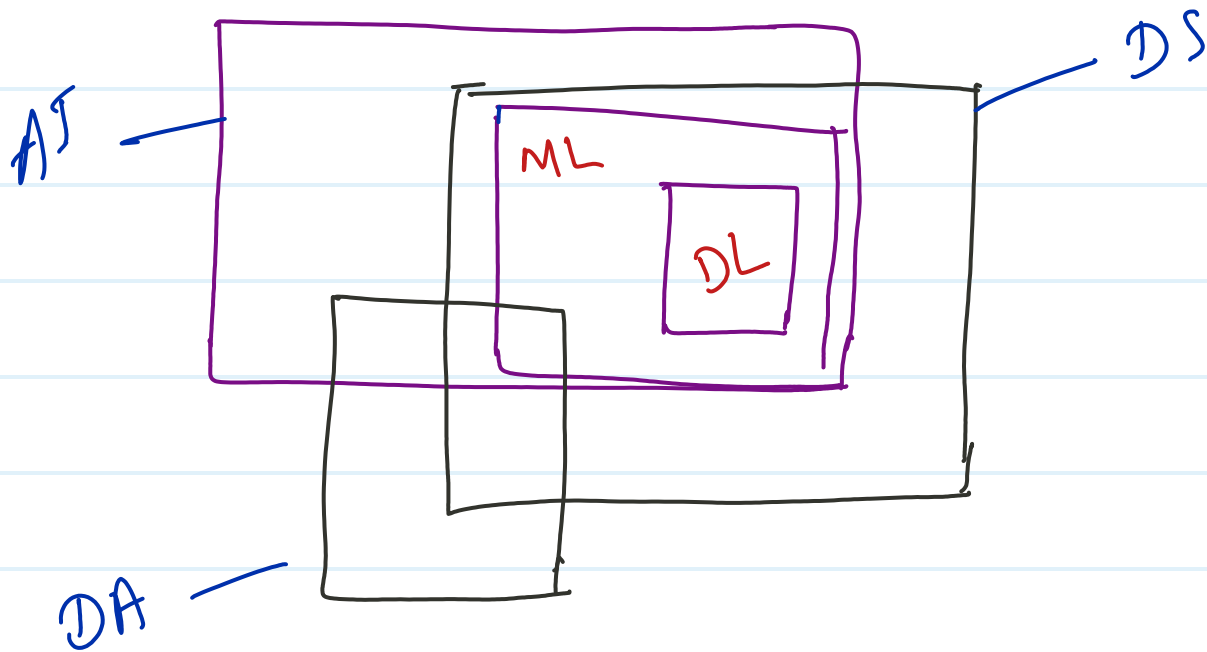


# machine learning



## machine learning type

Supervised ML

Unsupervised ML

Label data

Unlabel data

$x \ y$

$x \ x$

# Supervised ML

Regression

Classification

- ① Linear Reg.
- ② Lasso  $L_1$
- ③ Ridge  $L_2$
- ③ ElasticNet
- ④ KNN R
- ⑤ SVR
- ⑥ DTR
- ⑦ RFR
- ⑧ Ada boost R
- ⑨ Gradient boost R.
- ⑩ XG boost R.
- ⑪ Polynomial Reg.

- ① logistic Regr.
- ② naive bay's
- ③ KNN C
- ④ SVC
- ⑤ DTC
- ⑥ RFC
- ⑦ Ada boost C.
- ⑧ Gradient boost C
- ⑨ XG boost C.

# Unsupervised

## clustering / Grouping

- i) K mean clustering
- ii) K mean ++
- iii) Hierarchical clustering
- iv) DB scan
- v) Apriory Algorithm
- vi) PCA

## Time series

- ① Arima
- ② Sarima

- ① missing value handling
- ② encoding
- ③ scaling
- ④ outlier / noise / anomalies detection
- ⑤ Distribution transformation
- ⑥ feature Engg.
- ⑦ feature selection
- ⑧ EDA
- ⑨ Hyperparameter tuning
- ⑩ model save
- ⑪ Deployment