1. Data ingestion
2. EDA
3. Preprocessing
4. model buliding
5. model evalution

Regression, classification.

= time series.

1. time dependent-
   - univariate.
   - multivariate.
2. EDA.
3. Procesing.
4. model buliding

= classical.

- ARIMA
  SARIMA
  SARIMAX
  EMWA

Deeplearning

RNN
GRU
LSTM
encoder -decoder

N-beats
deepar

built-inframe.

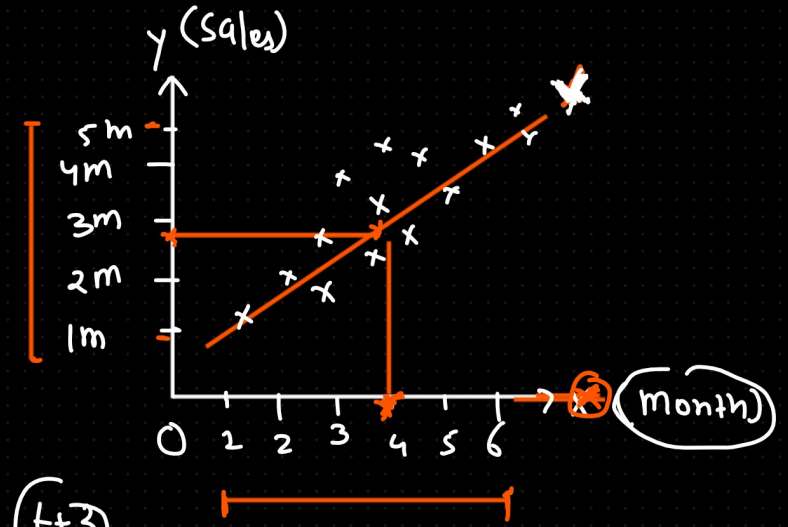
fbprophet-

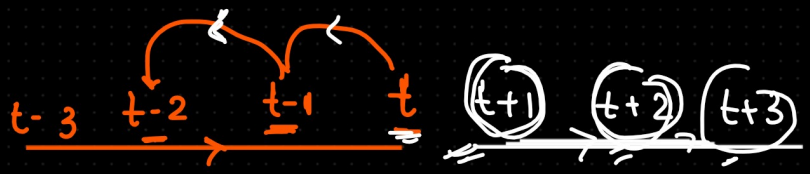
5. MSE, RMSE, MAE
   AIC, BIC

Linear regression

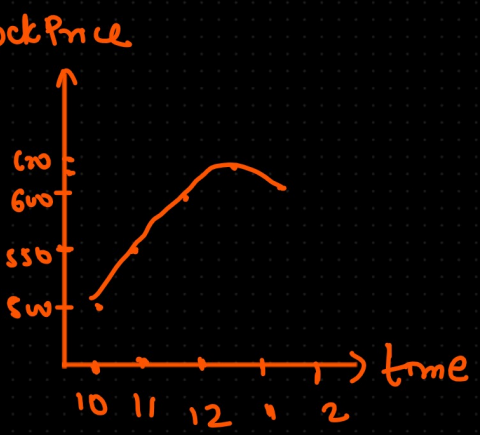
ARIMA

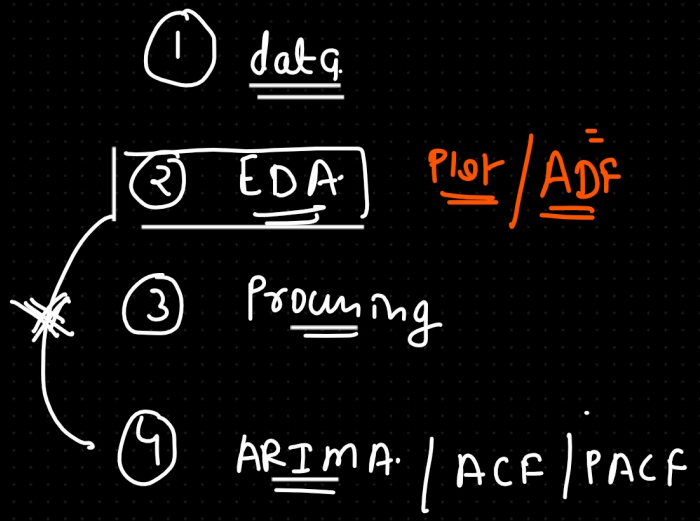
month	sales





10:00 Am	500
11:00 am	550
12:00 Pm	600
13:00 Pm	620
14:00 pm	610
15:00 Pm	

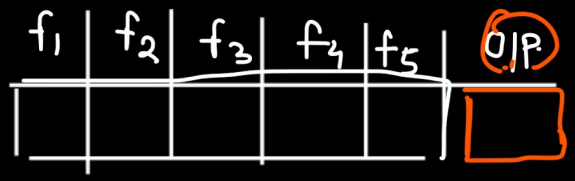




* Stationary data → Mean constant
Variance constant.

Regression. $y = mx + C$.

$y = m_1x_1 + m_2x_2 + m_3x_3 + m_4x_4 + m_5x_5 + C$.



1600

700-800

time series

t-2 t-1 t.

time	Sales.	
1hr	1k	t-4
2hr	2k	t-3
3hr	5k	t-2
4hr	6k	t-1
5hr	10k	t

$t = (t-1) + (t-2) + (t-3) + (t-4) + C$

ARIMA

1. auto regression. = p
2. Integration. = d
3. moving avgrage = Q

auto Correlation.

ARIMA

-(P, d, Q)

SARIMA

SARIMAX

100 → 60

1 ⟶ 60 ⇒ 61

∴ 61 ⟶ 120 ⇒ 121