Time Series

Non time Series

House Price Prediction

Size	location	Bedrooms	Price
1000	Delhi	2	55L
1600	BLR	3	85L
2000	mumbai	4	1cr

time

↑

Regression

Num

$Y = mx + c$

= time

(timestamp)

Day =
Hour
mnt
sec
month
year

time series

	Sales → Num
Day1	50L
Day2	20L
Day3	30L
Day4	70L
Day5	80L

= time

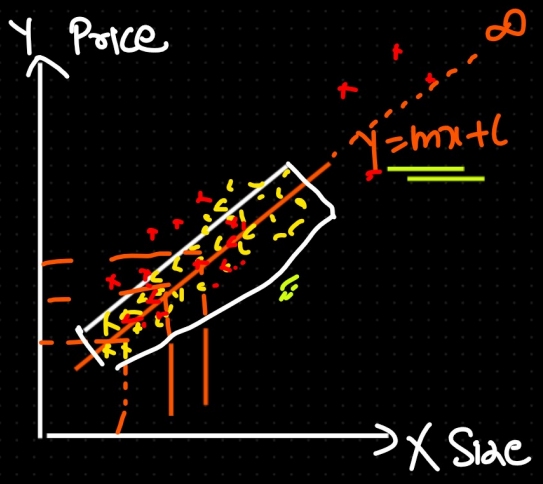
Pattern

Structure

10
20
30
→ ? =

= **Interpolation** => to Predict the value in the given range

Linear_reg

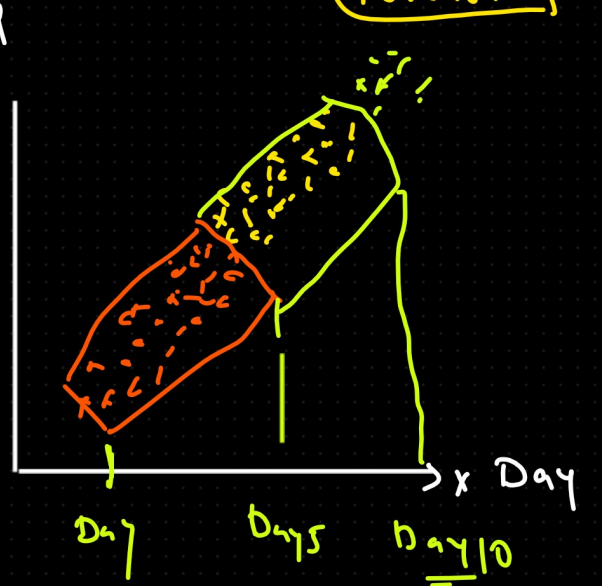


Supervised ML => Interpolation

Extrapolation => to predict the value outside the range

time series

forcast => Prediction



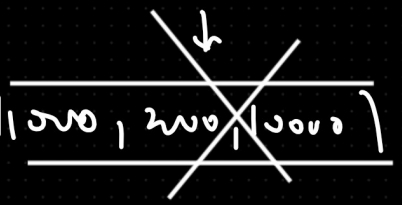
Wrong Prediction =

Wrong Prediction

0 - 100

↓

99. 90, 95, 101, 102, 1000, 2000, 3000



Q Why we should not use linear regression for TS ?

1. Interpolation and enpolation
2. TS having complex data not linear data
3. Outlier we should not use
4. Since in time series we have time depency.

= x^2, x^3

↓

= (Overfitting)

framing

forcasting

Example

1. finance → sale
2. medical → Previous medical future forcast
3. weather →
4. Social →

time → Data