1. Assumption of Linear Regression.
2. Data split ✓
3. Error Metrics ✓
4. Practical Implementation.

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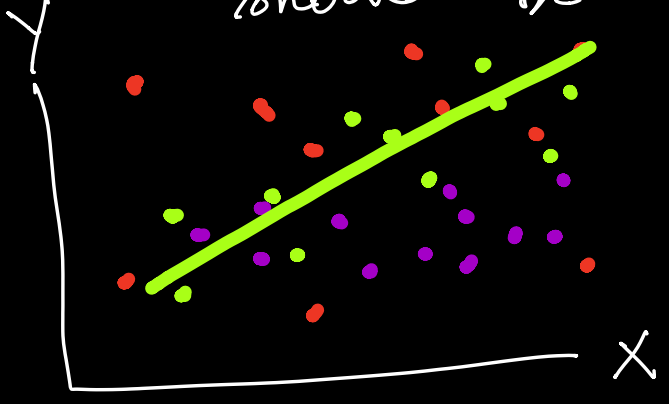
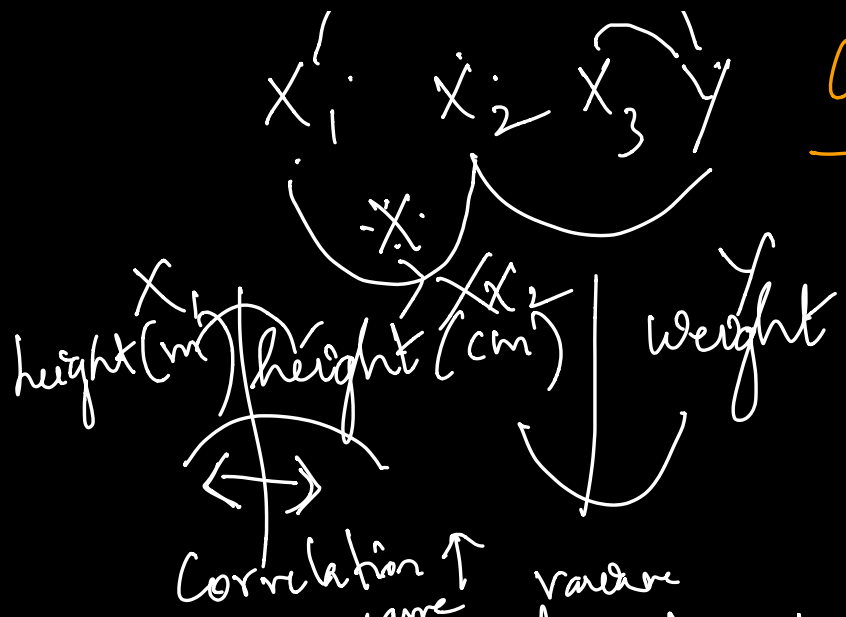
1. Assumption on Linear Regression.

1. Linearity ✓

relation b/w x and Y should be linear

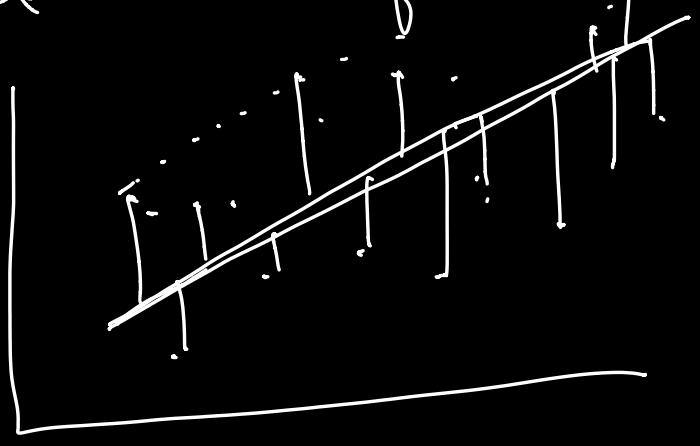


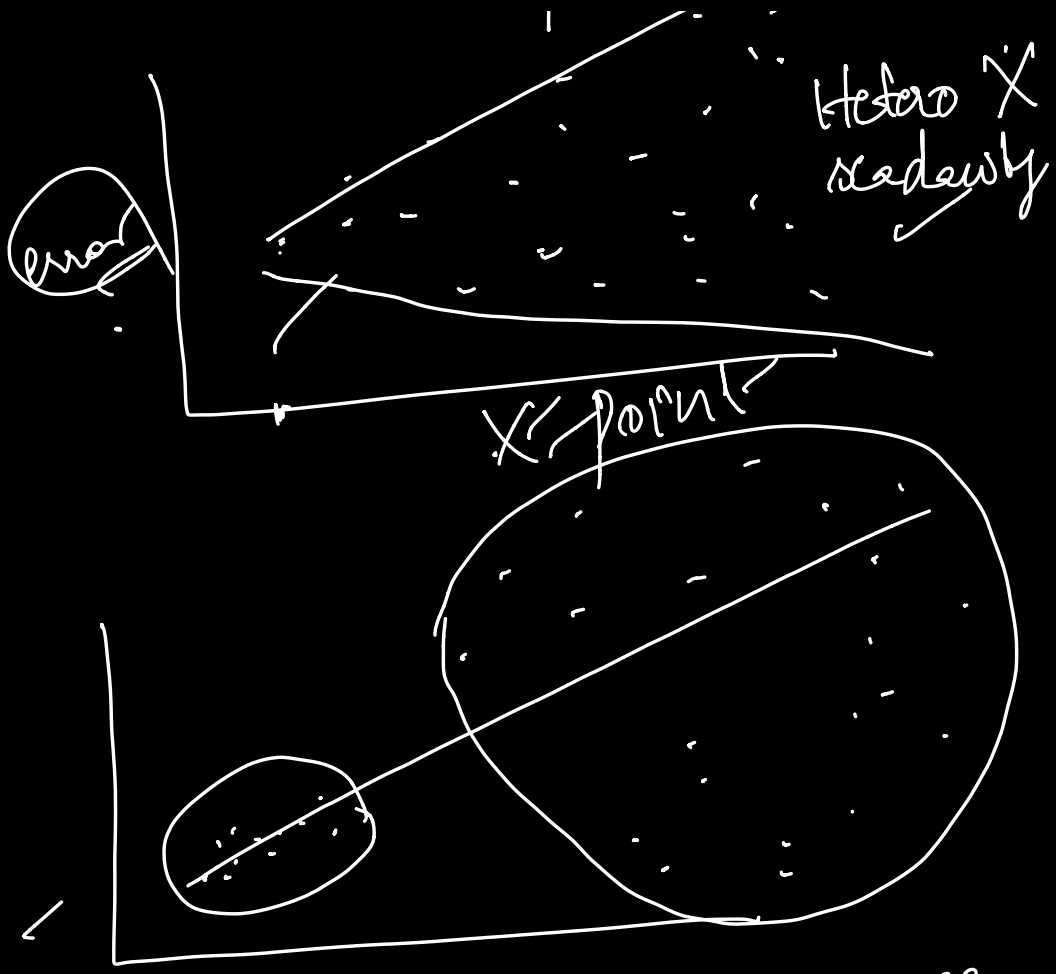
2. There should be less or no Multi Collinearity ✓ X



3. Homoscadacity :

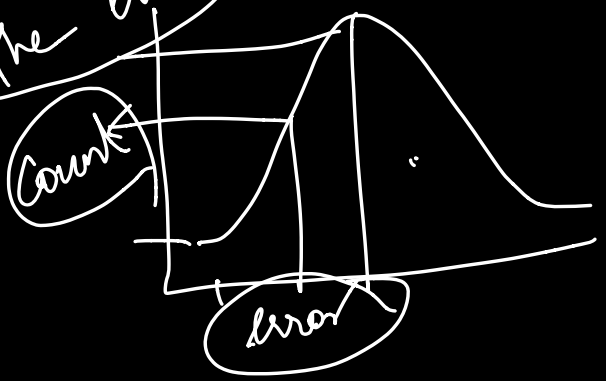
variance should be same of all value of residual



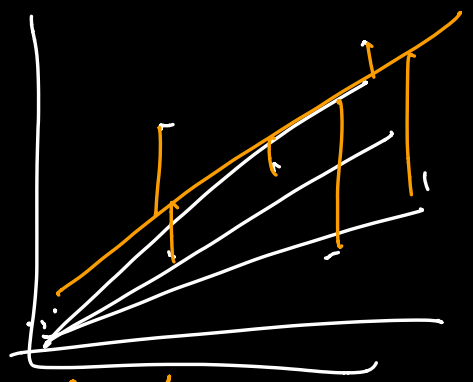


4. Error should be Normally distributed

grouping of the error



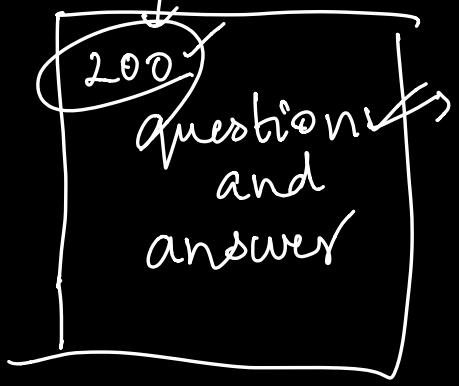
QQ plot



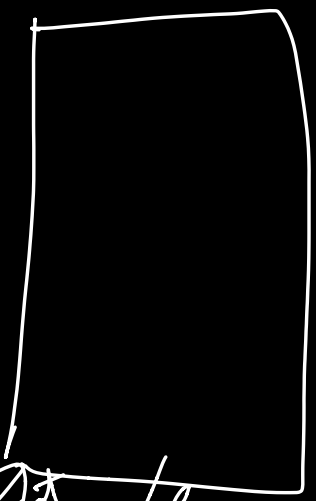
X_1 Edu	X_2 Age	X_3 Phone Numb	$\hat{Y}$ City	X_4 Company	Salary
✓	✓	X	✓	✓	

2. Data Split

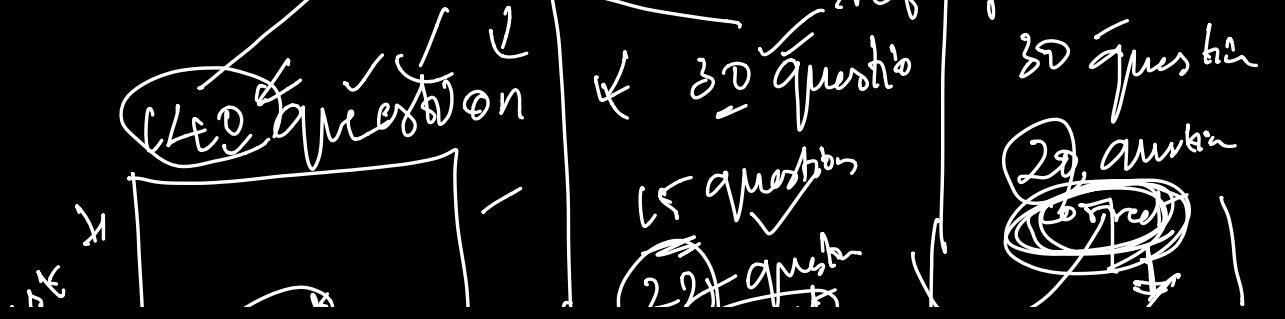
Topic : Subjects

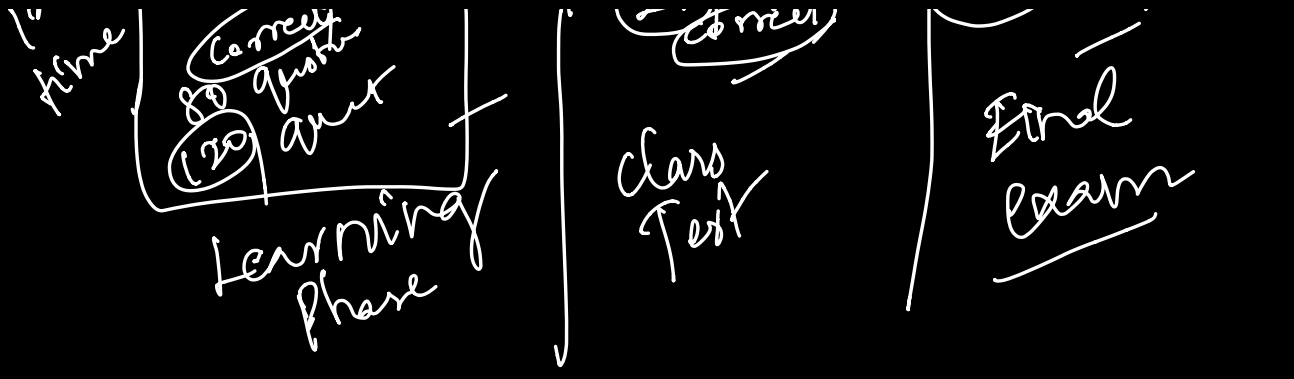


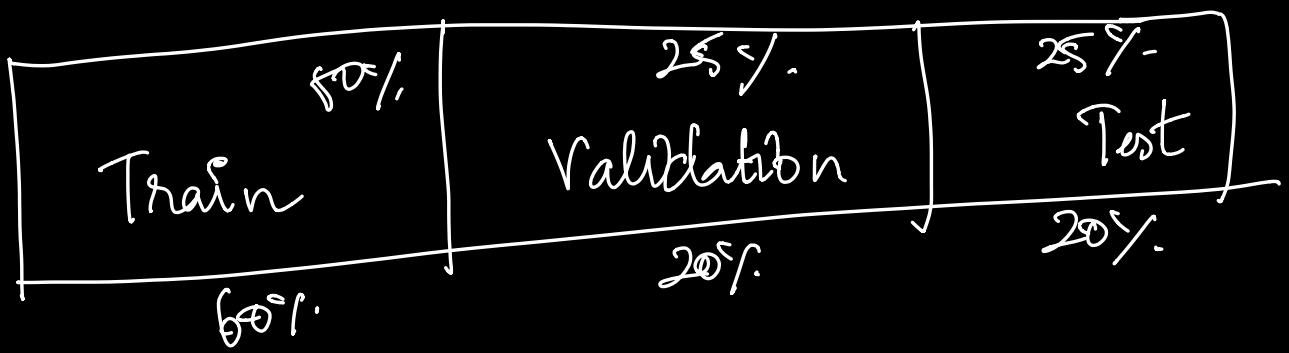
Google library
Text book

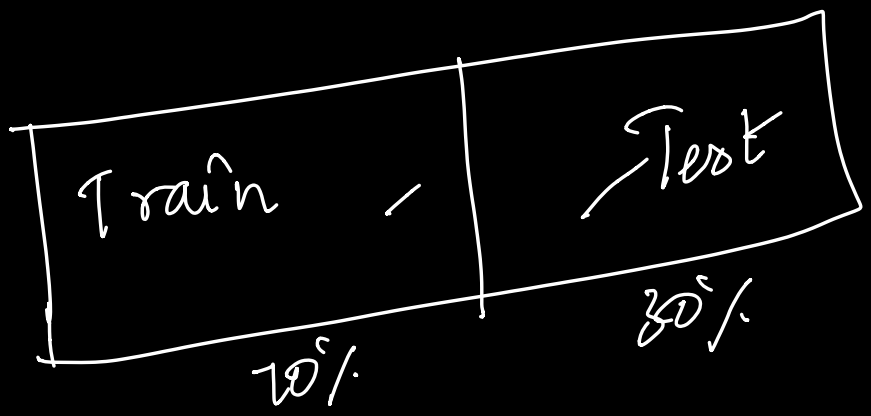


200 question









3. Error Metrics

1. Mean Squared Error (MSE)

$$\frac{\sum (y - \hat{y})^2}{n}$$

2. Mean Absolute Error

$$\frac{\Sigma |y - \hat{y}|}{n}$$

3. Root Mean Square Error

$$\sqrt{\frac{\Sigma (y - \hat{y})^2}{n}}$$

4. Mean Absolute Percentage Error

$$\Sigma \frac{1}{n} \left| \frac{y - \hat{y}}{y} \right| \times 100$$

5. R-square R^2

0 – 100

60 %

Adjusted R^2 –