will start at 9:05 PM

selling_price | make | year | f_1 | f_2 | f_3 | f_4

$$y = f(x)$$
$$\Downarrow$$
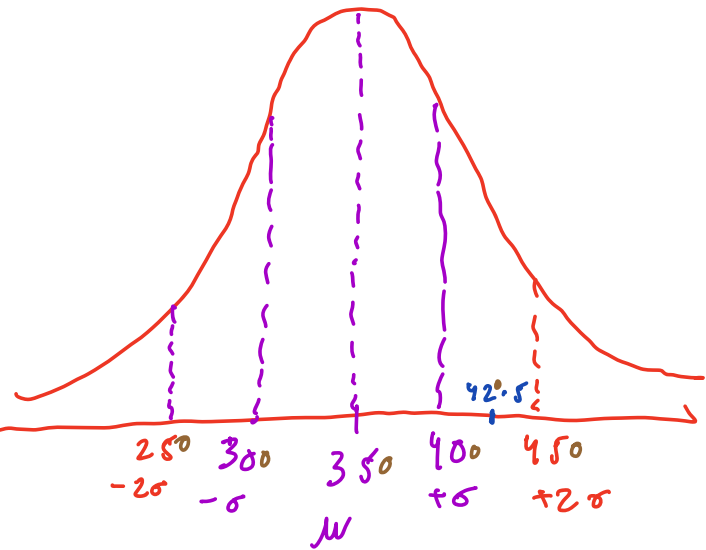$$x_1 + 2x_2$$

① z-score
② Min-max scaler

⇒ sd

45 marks = 2σ

$$\frac{45 - 35}{5} = \frac{10}{5} = 2$$

250 300 350 400 450
−2σ   −σ   μ   +σ   +2σ

42.5

$$\frac{42.5 - 35}{5} = \frac{7.5}{5} = 1.6$$

⇓

Z - score

σ = 5

$$\frac{x - \mu}{\sigma} = z$$

Class A :
    var
    def fun1( ) :

    a = A( )
    a. fun1( )

sk learn

Model = Linear Regression ()

Model . fit (x, y)

Price	height	width
y	x_1 cm	x_2 fit
—	50000	2
—	60000	3
—		5

$$m_1 x_1 + m_2 x_2 + c = y$$

shivank.agrawal_1 @ scaler-com

Feb Beg

$\boxed{\text{Error}}$ $\Rightarrow$

$\Rightarrow \quad \varepsilon \, (y_i - \hat{y}_i)^2$

M1

M2

X_1	Y	$\hat{Y}$	
5	4	4	$\Rightarrow 0$
6	5	5	$\Rightarrow 0$
9	7	8	$\Rightarrow 1$
			$\Rightarrow 1$

$$\hat{Y} = x - 1 \quad \Rightarrow M1$$

X_1	Y	$\hat{Y}$	
500	400	400	$\Rightarrow 0$
600	500	500	$\Rightarrow 0$
900	700	800	$\Rightarrow 100$
			$\Rightarrow (100)^2 \Rightarrow 10^4$

$$\hat{y} = x - 100 \quad \Rightarrow M2$$

$$R^2 \quad (\text{coeff of Determination})$$

$$\frac{SS_{res}}{SS_{total}} \Rightarrow 0$$

SS res

SS total

$$\frac{SS_{res} \rightarrow big}{SS_{total}}$$

$$\approx 1$$
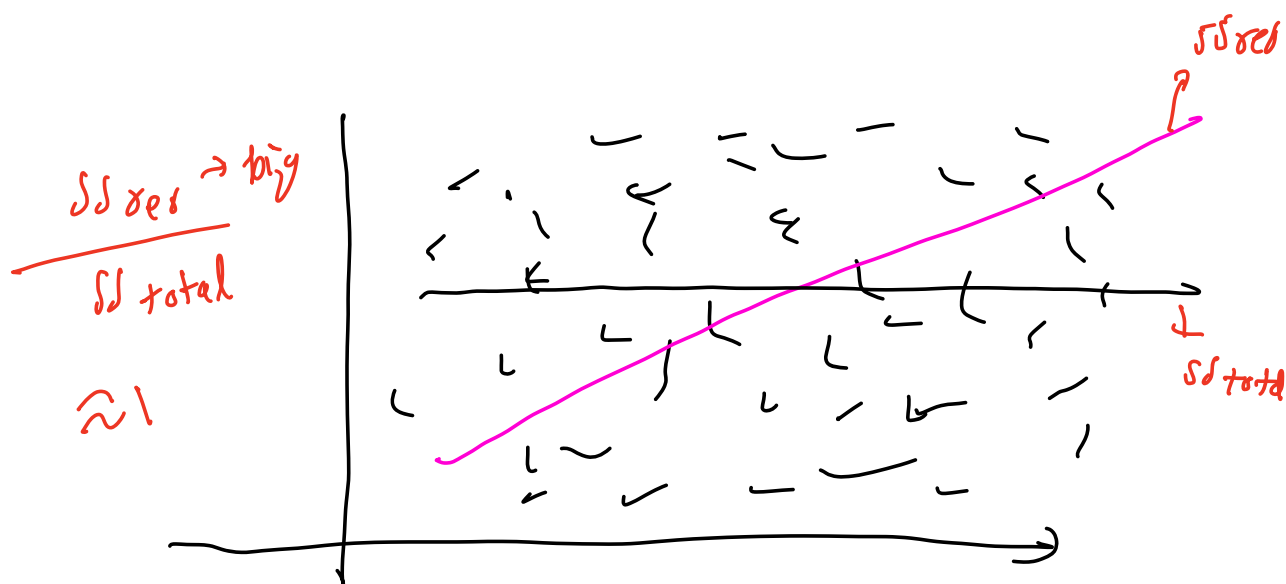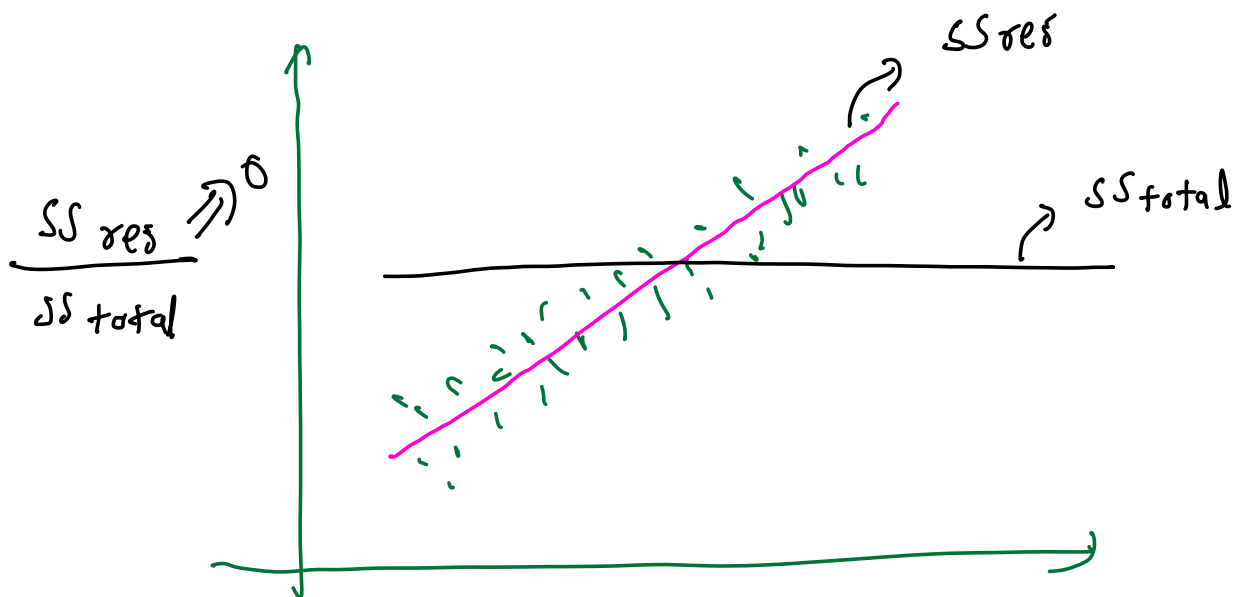
SS res

SS total
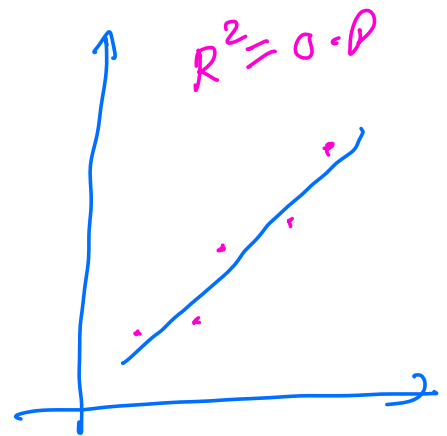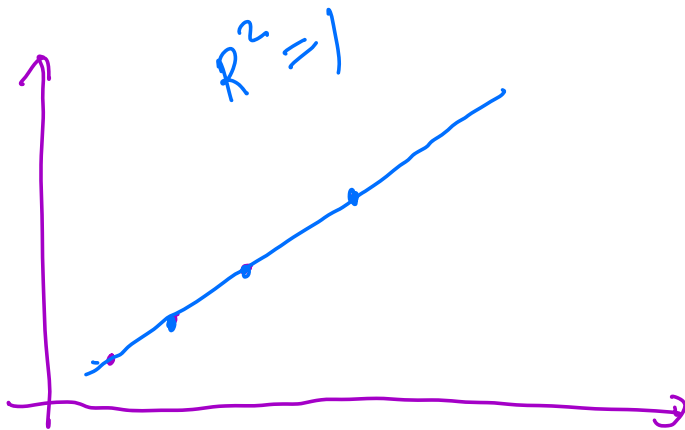
$$R^2 = 1 - \frac{SS_{res}}{SS_{total}}$$

$$= 1 - \frac{\sum_{i=1}^{n} (y_i - \hat{y}_i)^2}{\sum (y_i - \bar{y})^2}$$

$$\sum_{i=1}^{ } \quad L \mathcal{G} + \quad \mathcal{G} I$$

$R^2 = 1$

$R^2 = 0.0$

Model . score (x, y)

$\Rightarrow$

Error

Optimization
method

Input
Train
Data

Model

output