

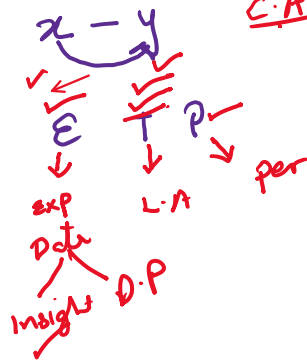
Struct / Unstruct

M.L

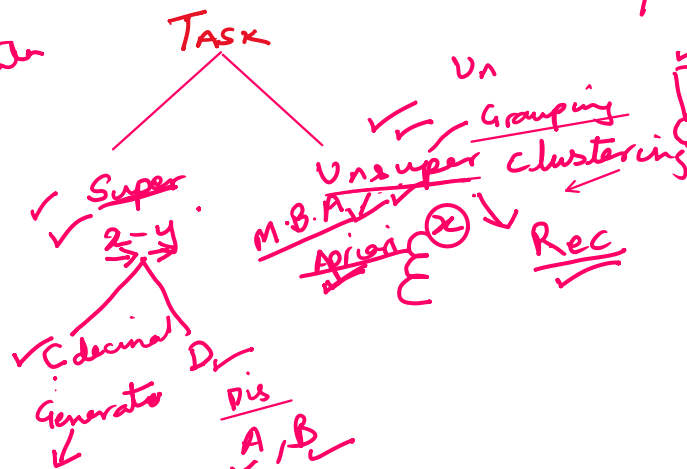
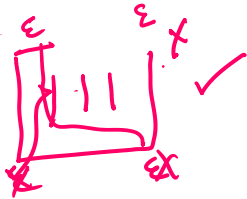
C.A

learned \Rightarrow Per

Age C
12
2.5
5.5-7
temp
5.0
7.5
Count of bp
1



x_1	x_2	x_3	y
A	G	S	Y



$\begin{matrix} A & G & E \\ \hline \end{matrix} \rightarrow x$
 $\begin{matrix} B \\ \hline \end{matrix} \rightarrow 1-5, 7$
 $\begin{matrix} B \\ \hline \end{matrix} \rightarrow 100$
Bisleri 20

x_1 Gen M
 x_2 height 5.2
 x_3 weight 57
 Role \rightarrow D
 Sal 57,000
 P-110
Linear Regression
 S.M

$\begin{matrix} 1,2,3 \\ \hline A & B & C & M \\ \hline \end{matrix}$
 25 25 25 25

Logistic Reg

Tree
 Decision
 Random
 x4BM

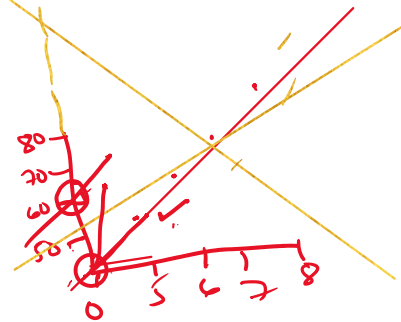
D.L

$$y = B_0 + B_1 x_1 + e$$

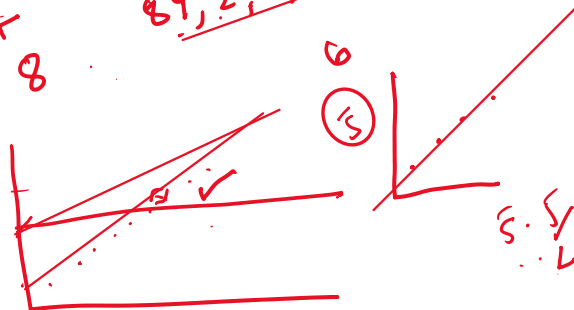
$a > 0$

$y = B_0 + B_1 x_1 + \epsilon$
 B_0 B_1 x_1 ϵ
 intercept slope error
 Weight Age
 Student Marks
 50
 60
 70
 80
 90
 100

$B_1 > 0$
 $B_1 = 0$



$x = 0, 1, 2$
 $y = 5, 6, 7$



linearity
 ✓

height
 $r = \text{colinearity}$

$$\frac{(x_1 - \bar{x})^2 (y_1 - \bar{y})^2}{\sqrt{(x_1 - \bar{x})^2 (y_1 - \bar{y})^2}}$$

x y
 \uparrow \uparrow
 \downarrow \downarrow
 \uparrow \uparrow
 \downarrow \downarrow
 [corr]

$\frac{1}{\sqrt{1}}$ $\frac{1}{\sqrt{1}}$ $\frac{1}{\sqrt{1}}$ \rightarrow Build