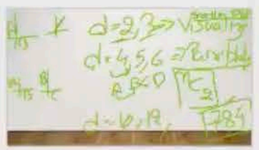
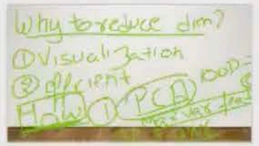
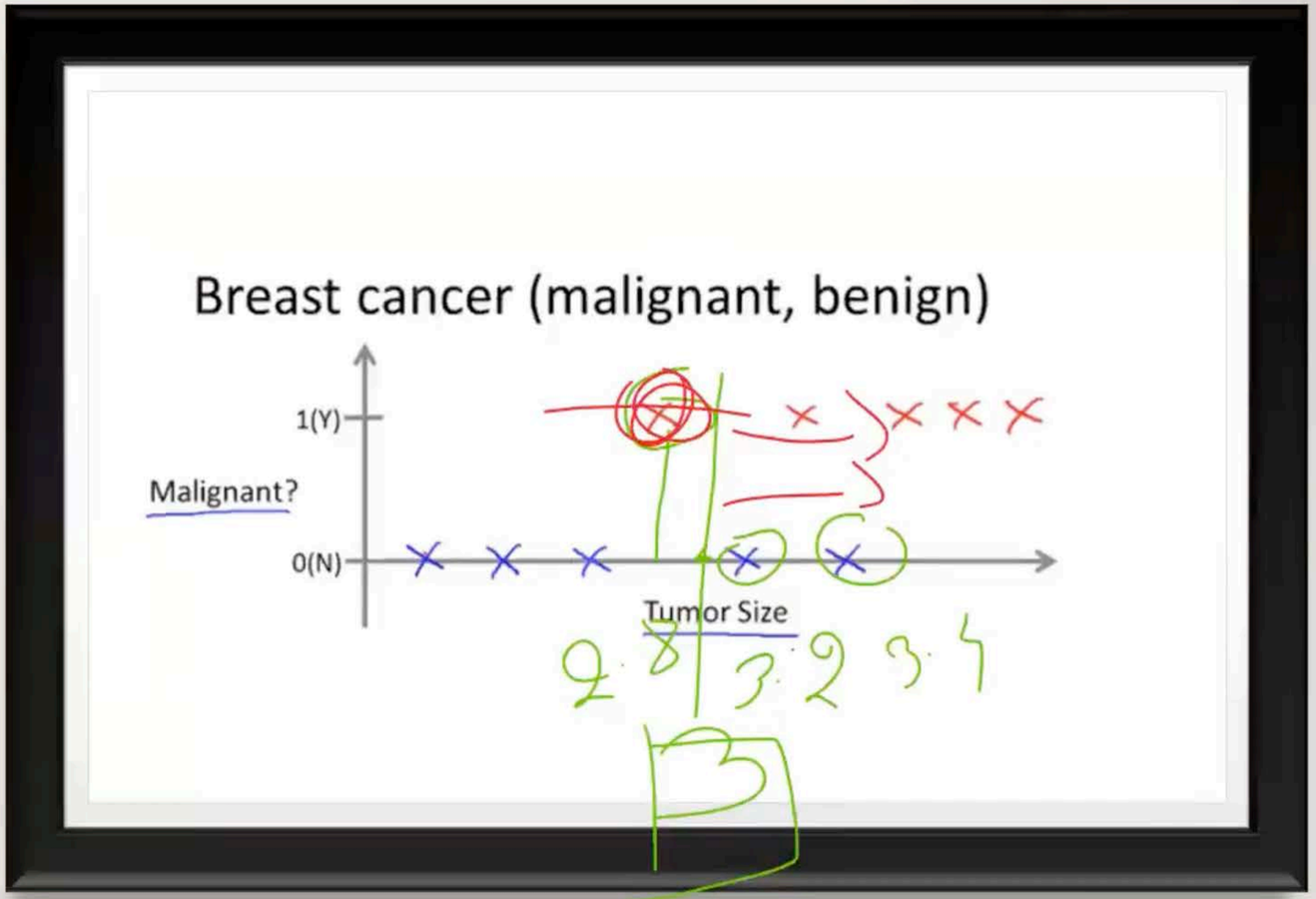


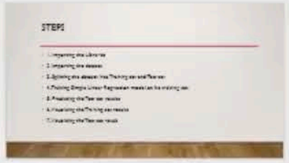


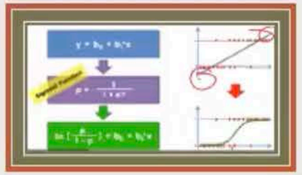



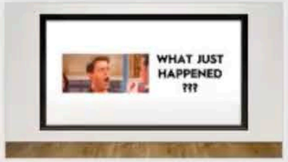

CLASSIFICATION

BREAST CANCER







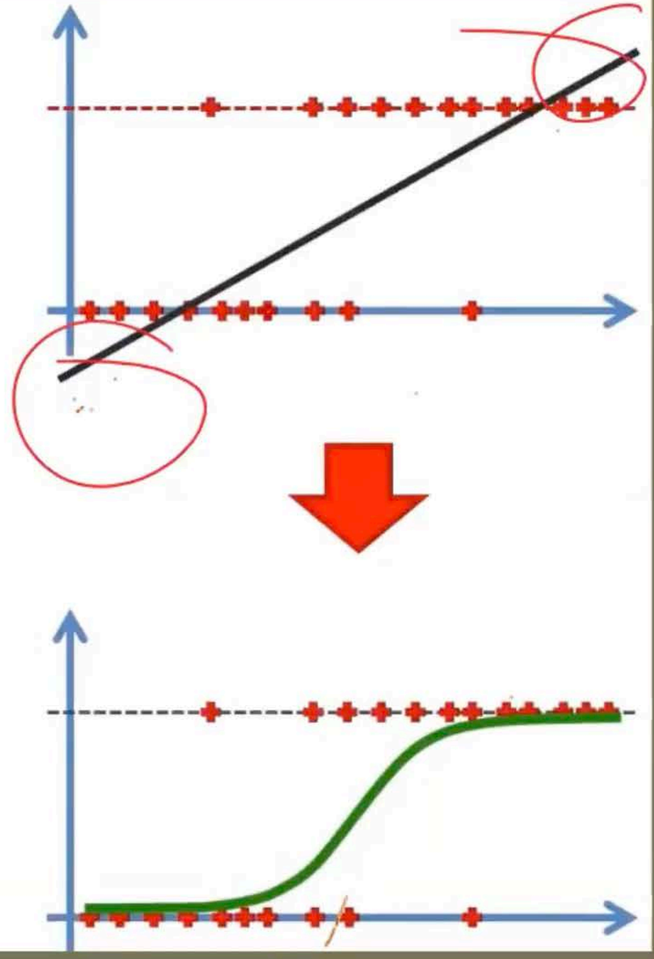


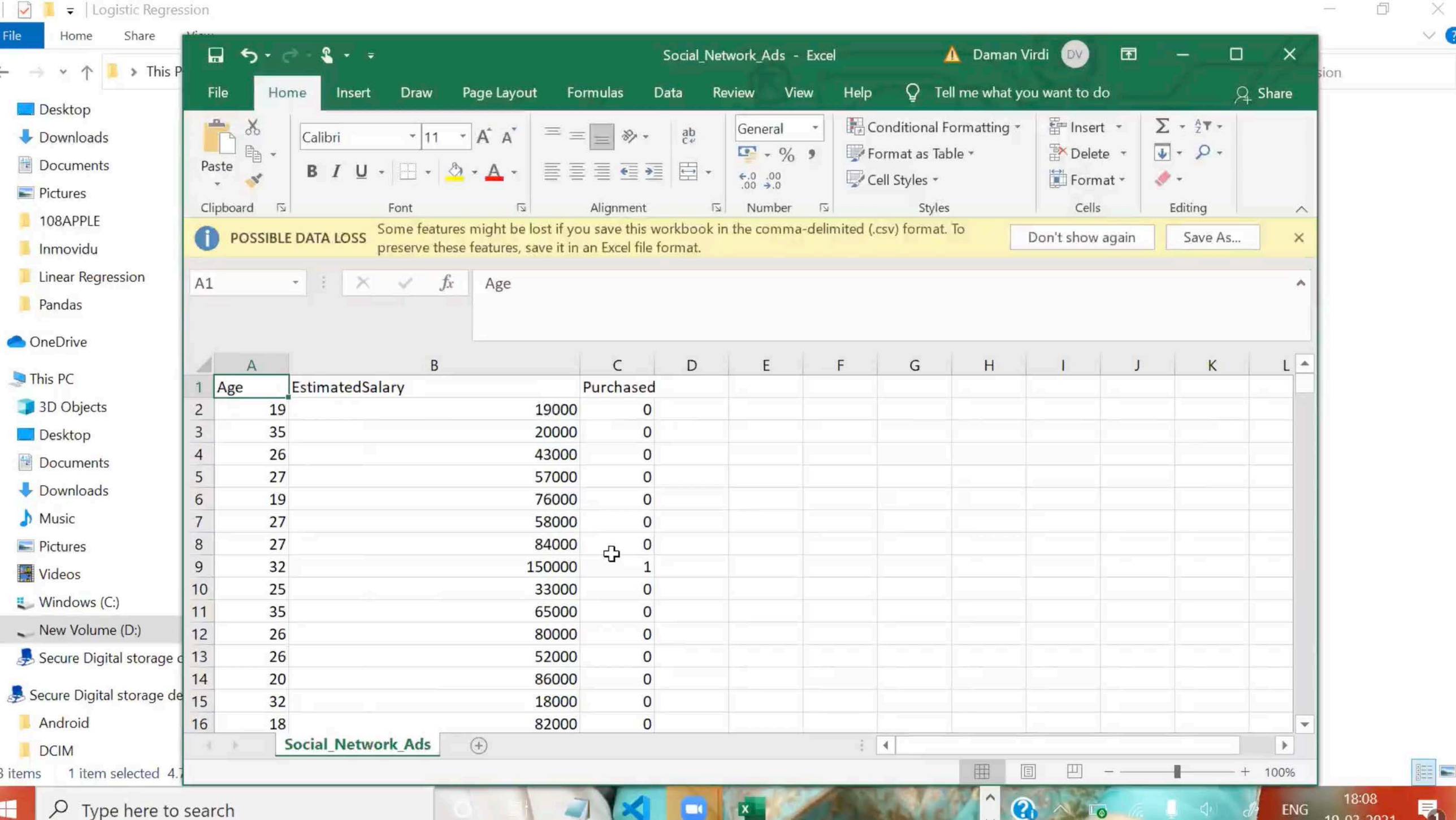
$$y = b_0 + b_1 * x$$

Sigmoid Function

$$p = \frac{1}{1 + e^{-y}}$$

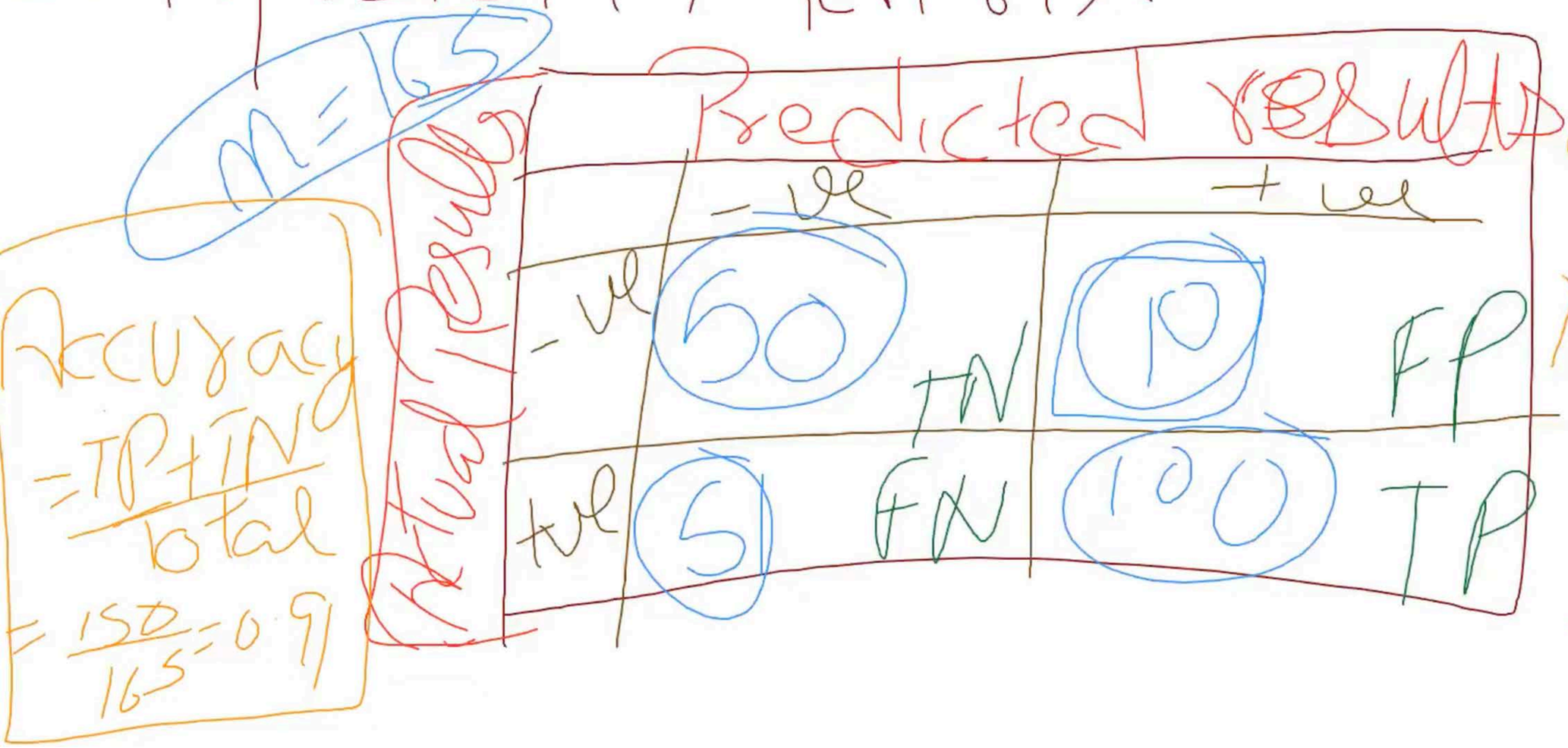
$$\ln\left(\frac{p}{1-p}\right) = b_0 + b_1 * x$$





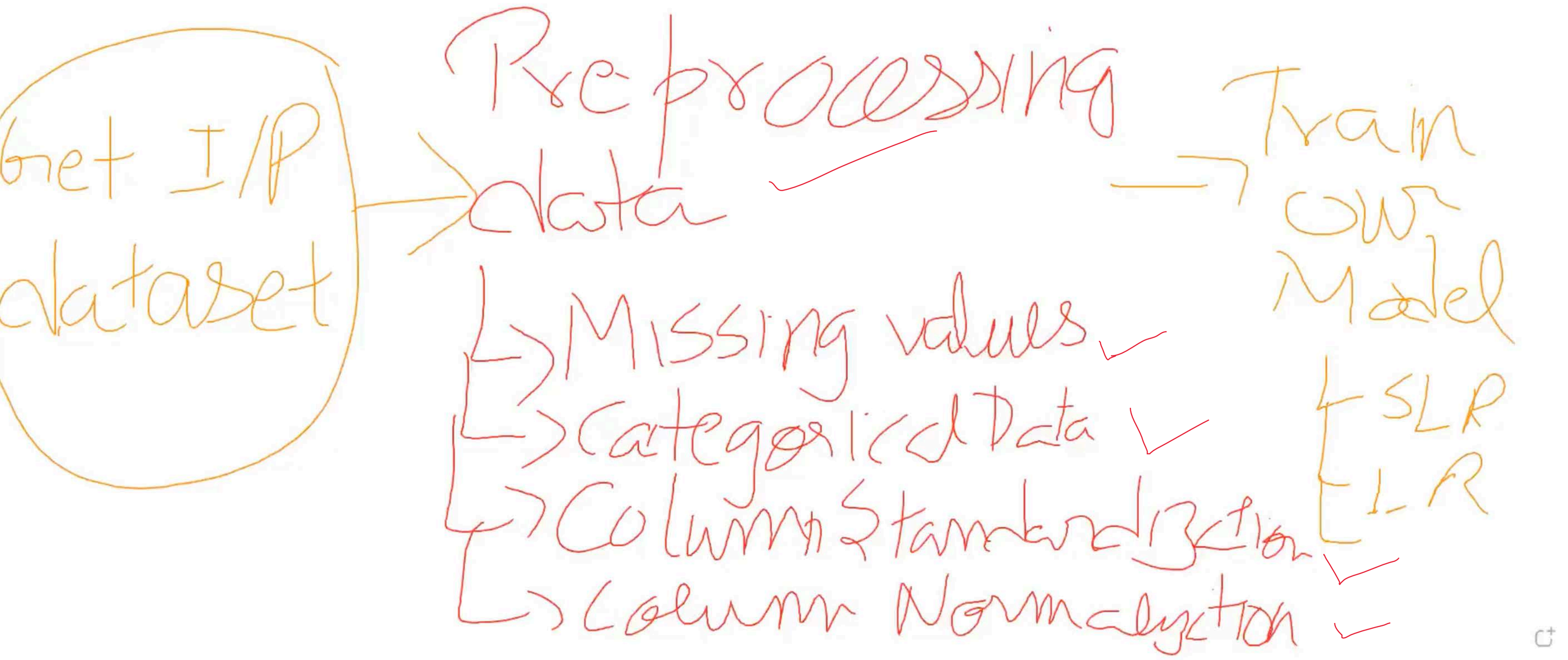
	A	B	C
1	Age	EstimatedSalary	Purchased
2	19	19000	0
3	35	20000	0
4	26	43000	0
5	27	57000	0
6	19	76000	0
7	27	58000	0
8	27	84000	0
9	32	150000	1
10	25	33000	0
11	35	65000	0
12	26	80000	0
13	26	52000	0
14	20	86000	0
15	32	18000	0
16	18	82000	0

Confusion Matrix



Accuracy
$= \frac{TP+TN}{total}$
$= \frac{150}{165} = 0.9$

Error rate
Misclassification Rate
$\frac{FP+FN}{T} = \frac{15}{165} = 0.09$


Get I/P
dataset
Preprocessing
data
Missing values
Categorical Data
Column Standardization
Column Normalization
Train
our
Model
SLR
LR