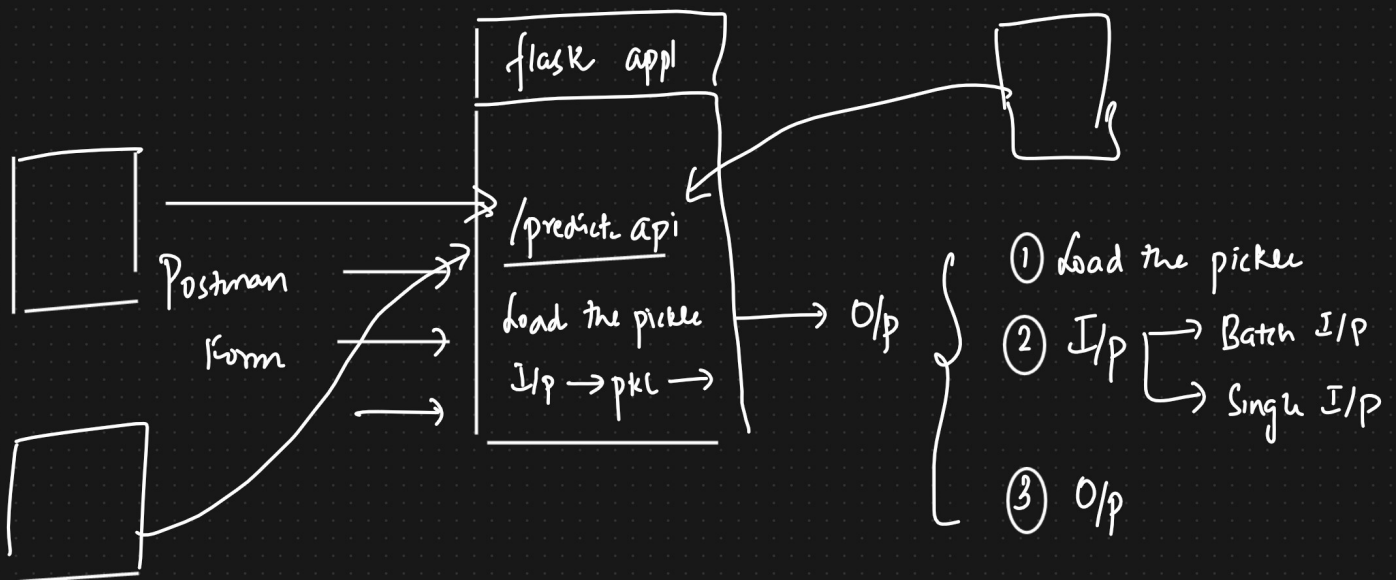
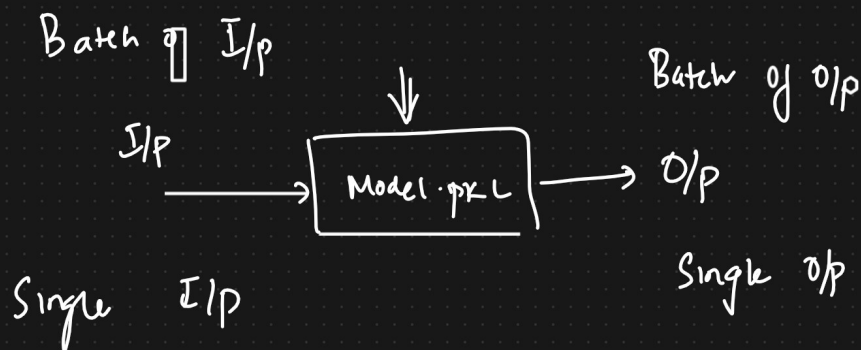
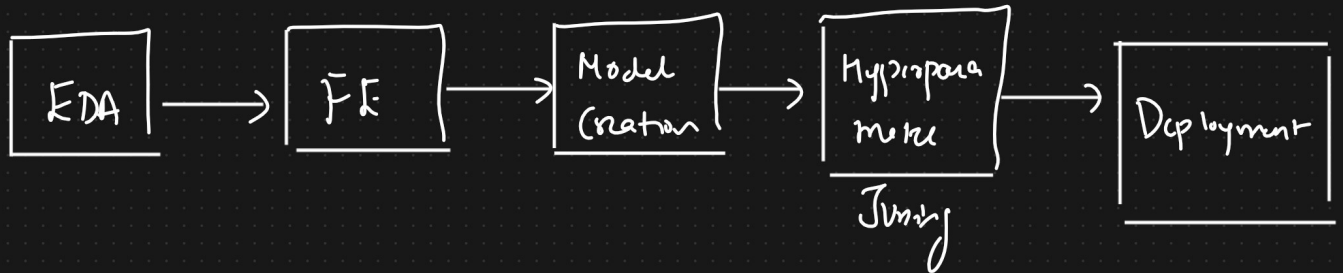


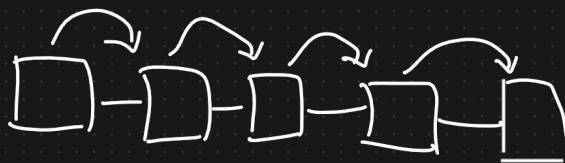
① Life cycle of DS projects

Gridsearchcv → { pickle } → Save the model
 Random Forest Regressor
 picker

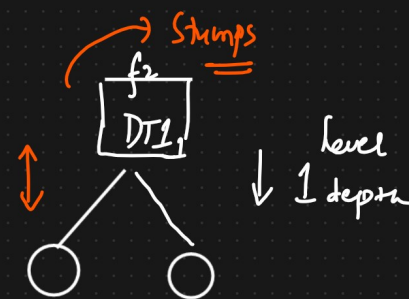


[Boosting Algorithm]

Ada Boost



f_1	f_2	f_3	o/p	Equal Weights	Update Weight
-	-	-	Yes	$\frac{1}{7} \downarrow$	$0.058 \div 0.697$
-	-	-	No	$\frac{1}{7}$	$0.058 \div 0.697$
-	-	-	-	$\frac{1}{7}$	$0.058 \div 0.697$
-	-	-	-	$\frac{1}{7} \uparrow$	$0.349 \div 0.697$
-	-	-	-	$\frac{1}{7}$	$0.058 \div 0.697$
-	-	-	-	$\frac{1}{7}$	$0.058 \div 0.697$
-	-	-	-	$\frac{1}{7}$	$0.058 \div 0.697$
				<u>1</u>	<u>0.697</u>



① Total Error

$$TE = \left[\frac{1}{7} \right] \checkmark$$

② Performance of Stump

$$= \frac{1}{2} \log_e \left(\frac{1 - TE}{TE} \right)$$

$$= \frac{1}{2} \log_e \left(1 - \frac{1}{7} \right) = 0.895 \checkmark$$

Normalized weight

Bucketing

0.083 ↓	[0 - 0.083]
0.083 ↓	[0.083 - 0.166]
0.083 ↓	[0.166 - 0.249]
→ 0.500 ↑	{ [0.249 - 0.7497] ↑ }
0.083 ↓	[]
0.083 ↓	[]
0.083 ↓	[]
Generate ^{random} [0 - 1]	

$$\frac{0.166}{0.083} = 0.249$$

Correct Records $\frac{1}{7}$

$$(*) \text{ New Sample} = \text{Weight} \times e^{-P_s}$$

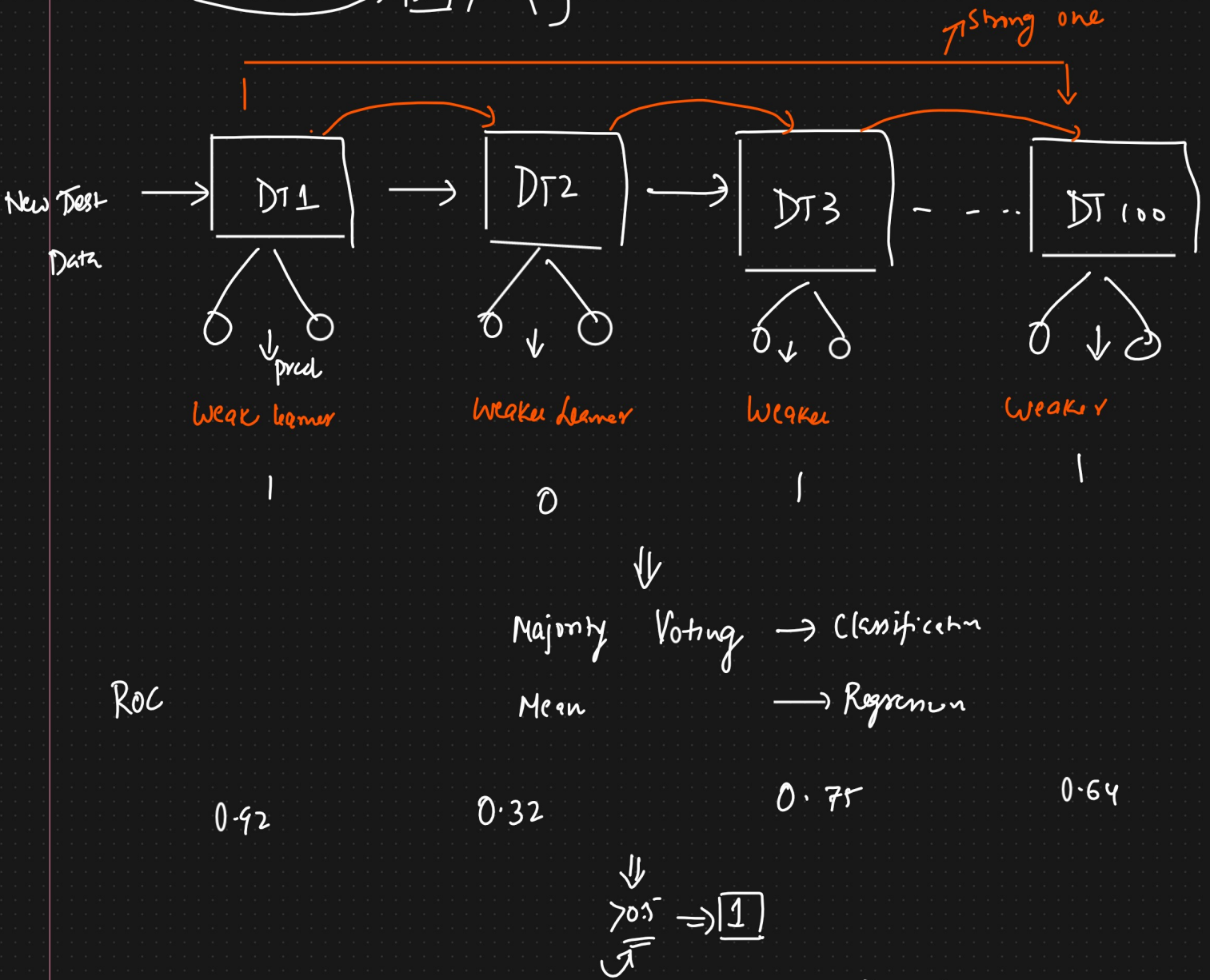
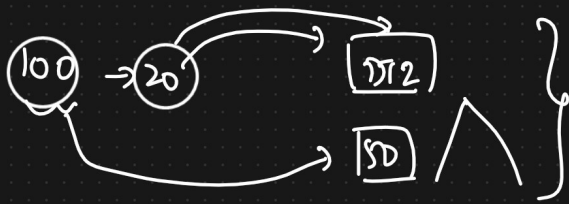
$$= \frac{1}{7} \times e^{-0.895}$$

$$= 0.05 =$$

Incorrect Records

$$(*) \text{ New Sample} = \text{Weight} \times e^{P_s}$$

$$= \frac{1}{7} \times e^{0.895} = 0.349 =$$



ILV

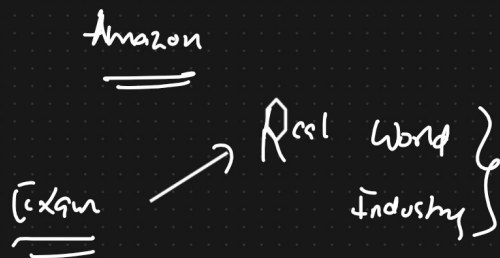
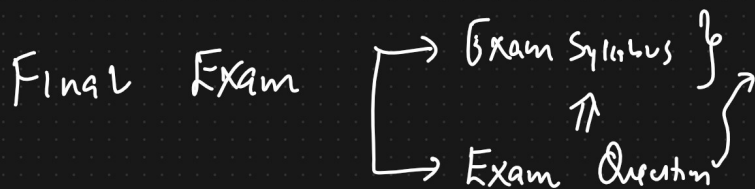
Deep Learning

① Black Box Models And White Box models

Linear Regression }
Decision Tree ✓
↓
White Box
↓
Gradient Descent

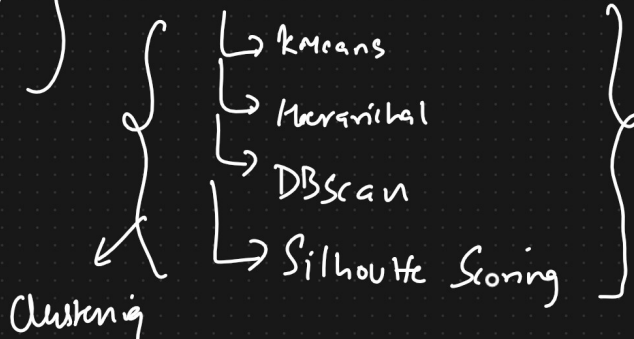
AdaBoost \Rightarrow Many DT
↓
Black Box Model

⑧ Interview → { Data Leakage }



{ Gradient Boosting
 XGBoost }

Unsupervised Learning



Kind to find