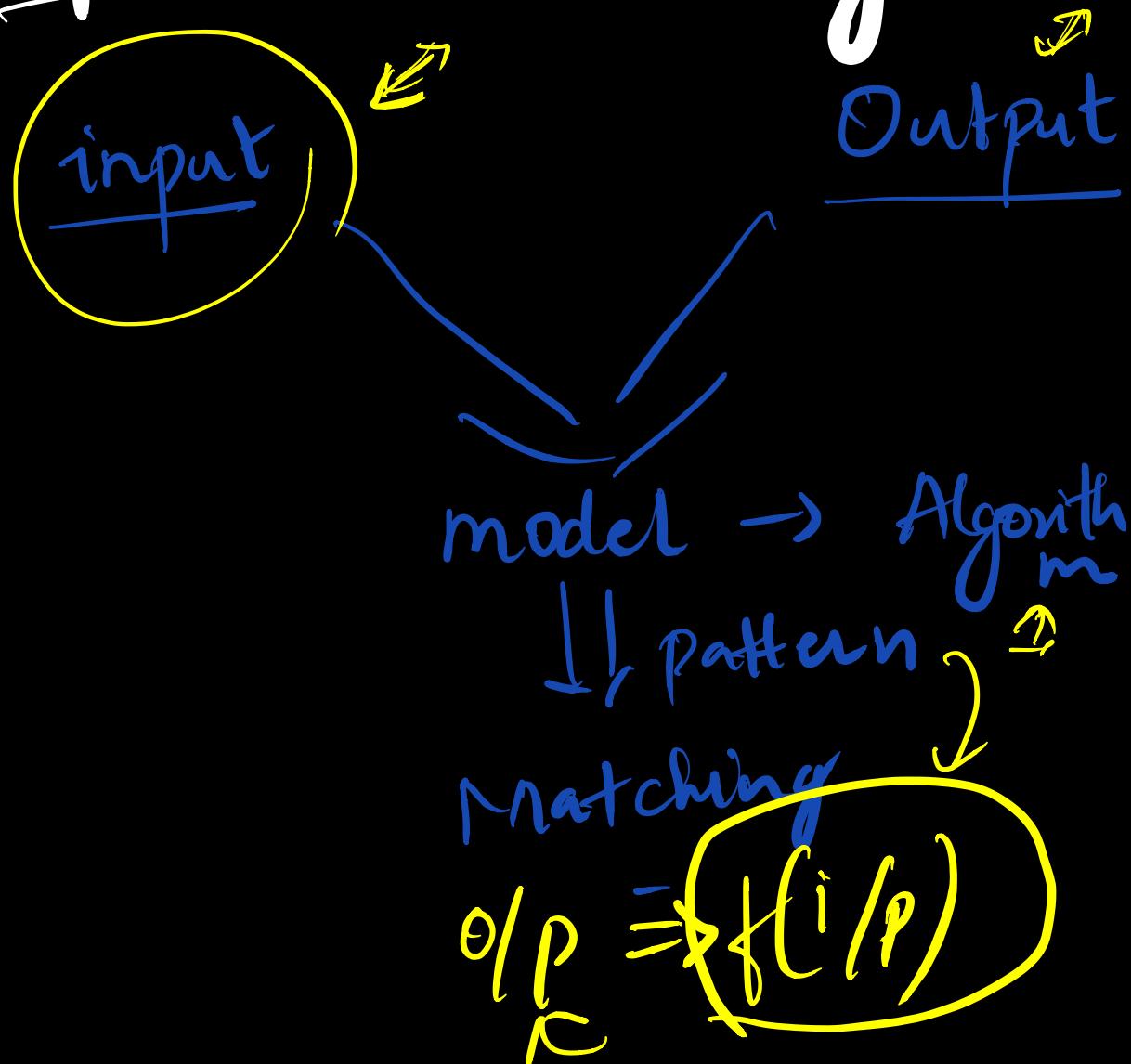


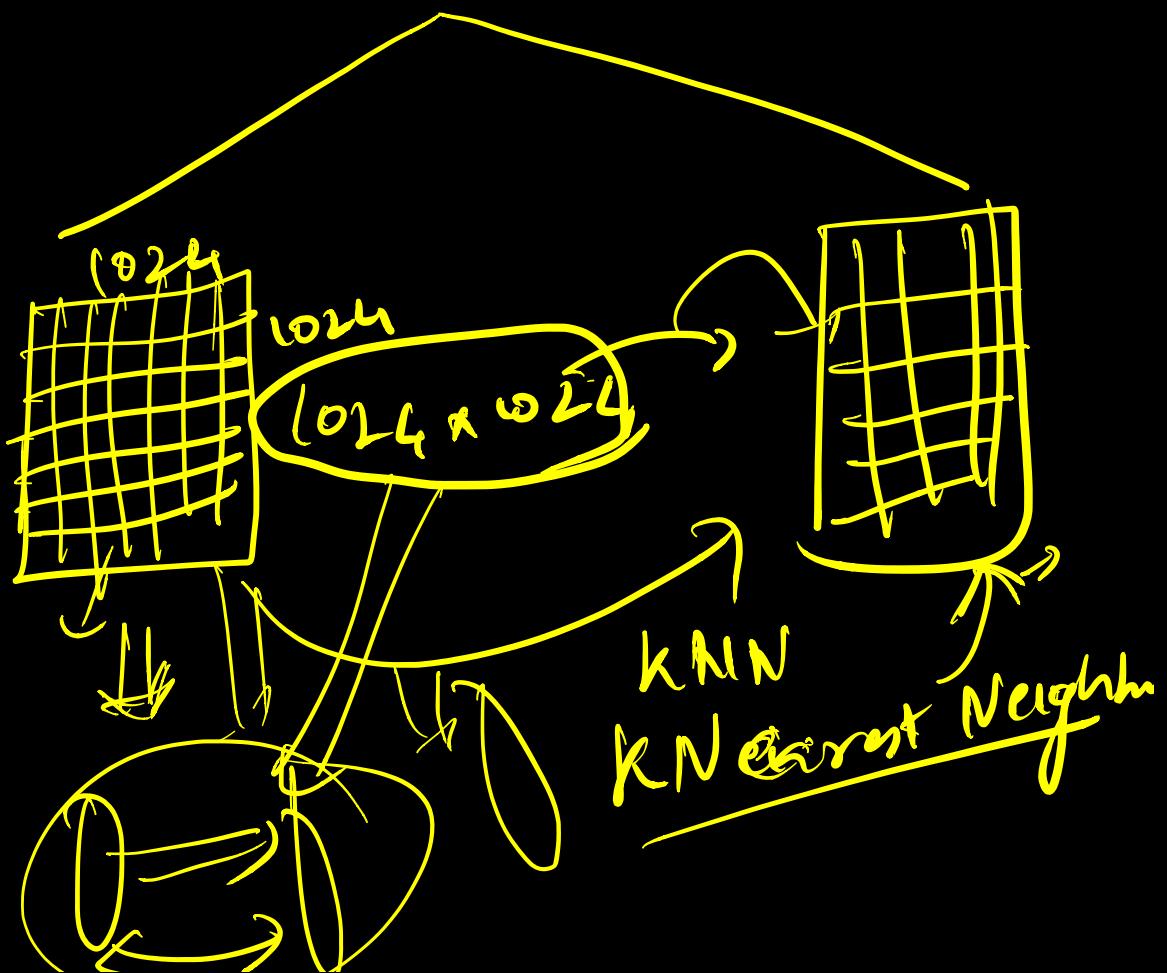
1. Allow yourself to helds in the hand  
of other
  2. Experience painful sharpening
  3. Correct your mistake  
Eraser in your  
upside
  4. what is there inside is more  
important how you  
are designed
  5. what ever the condition  
Please leave your mark
-

# Supervised Learning

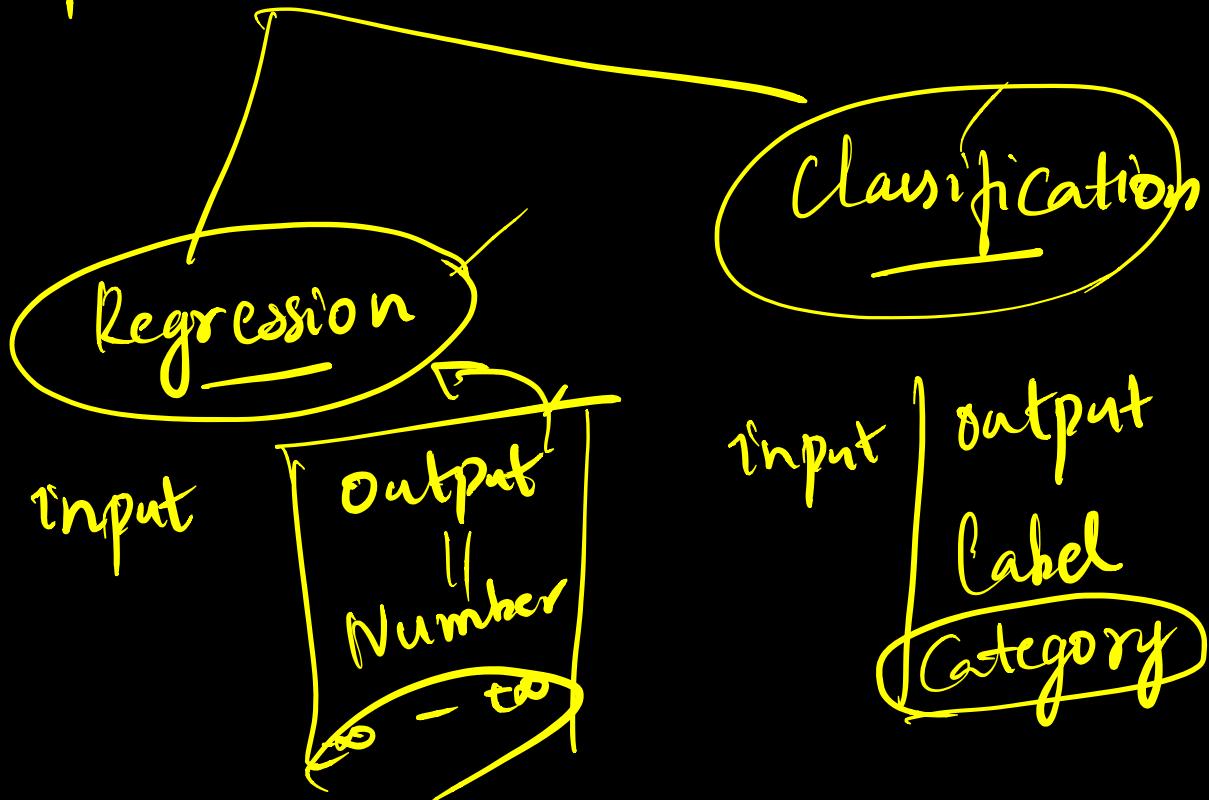


1. Spam detection - classification
2. Weather forecasting - Rain/No Rain
3. Predicting a disease - class

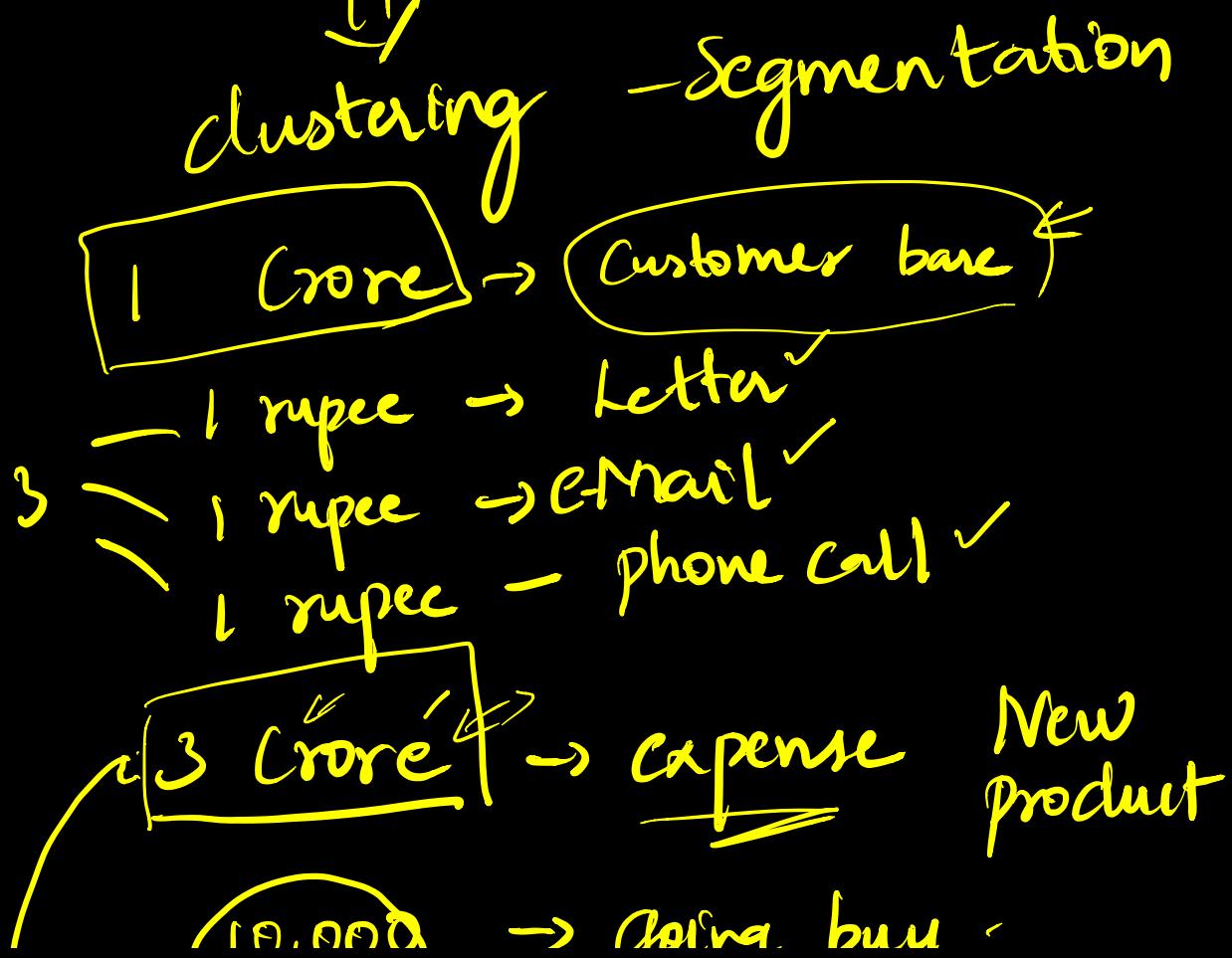
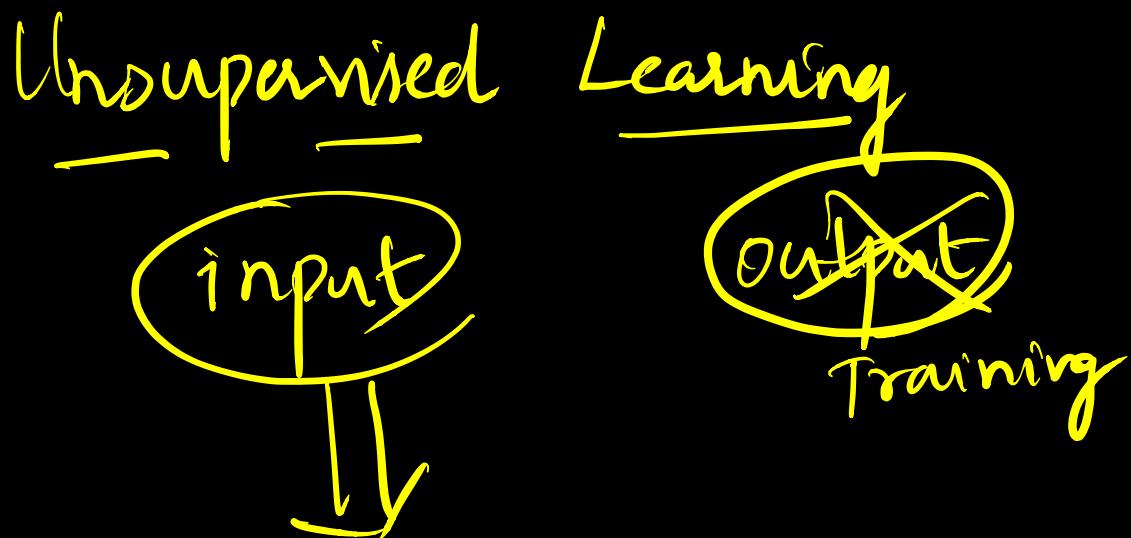
4. Price estimation - Regressor →
5. Sentimental Analysis - Classifier
6. Voice to text - Classifier → regressor
7. Fraud detection - classifier
8. Defaulter detection - classifier
9. Buy or Not - classifier
10. Defect Prediction - classifier

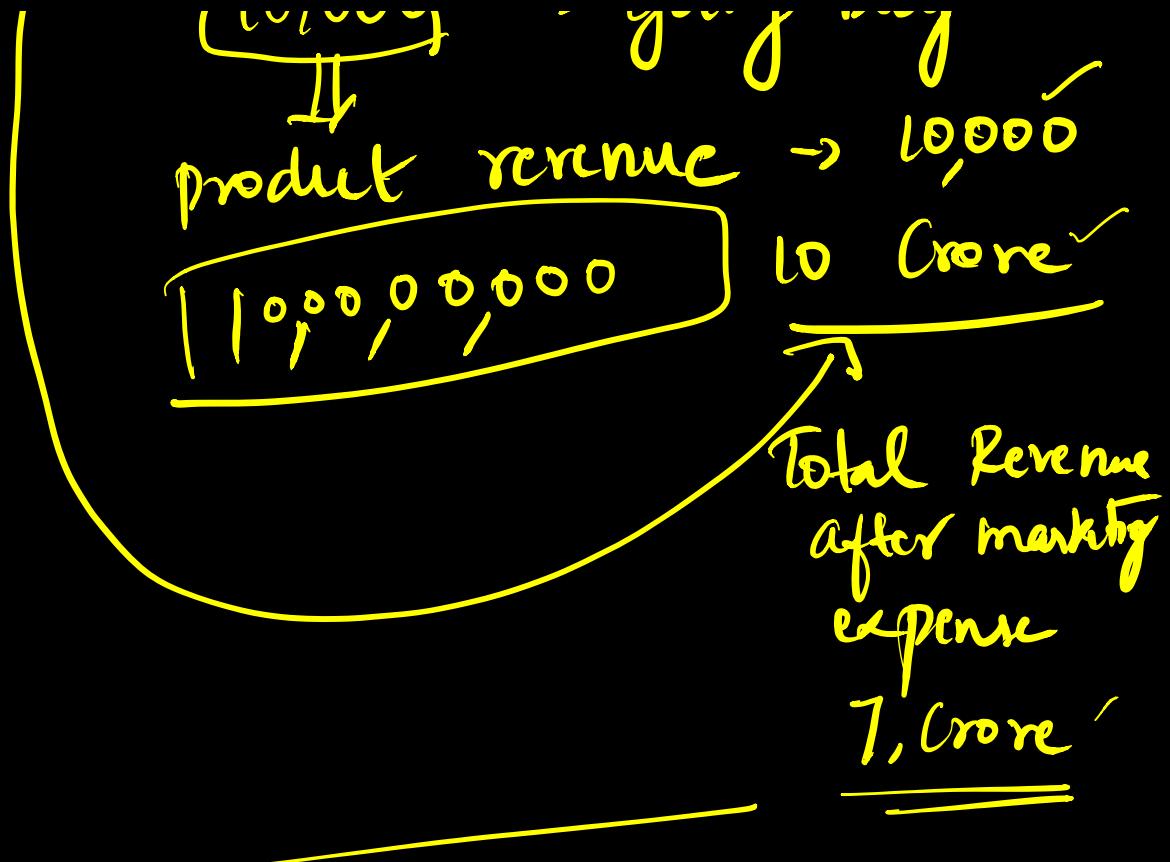


Supervised



Predict the House price - R  
Predict the Gender Hey - C  
Churn prediction - C





- 1. Low end customers 40 lakh
- 2. Mid range customers 30 lakh
- 3. High end customers 20 lakh
- 4. High premium Loyal customer 10 lakh

Concentrate on high PL Least

Marketing - 30 lakh

Total Product - 9000

sold

Total Revenue  $\rightarrow$  9 Crore

Total Revenue  $\rightarrow$  8.7 Crore  
after Marketing expense

---

How much money save

1.7 Crore

To laths ↓  
Man power, Time ↓

0.01%

k-means

k-means ++

Hierarchical

---

1. DNA Sample
2. Google News
3. Sports analytics → Cluster  
Pitch map  
Out strategy
4. Email segmentation
5. Recommendation
  - LinkedIn
  - Facebook
  - Amazon
  - Fulkrat
  - Youtube
6. Space
7. User behaviours
- 8.

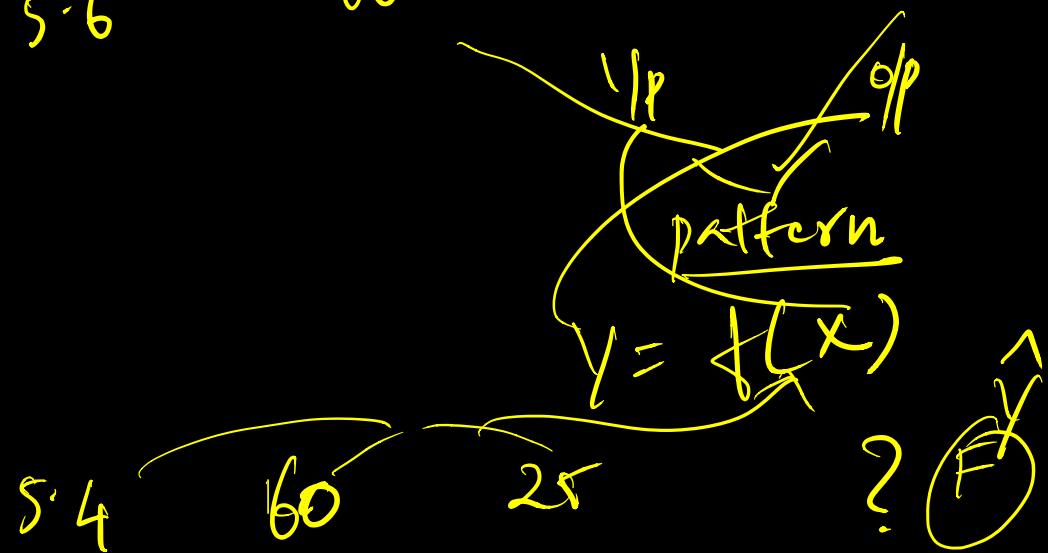
### Customer data

Age	Salary	Phone number	Qualification	Exp	cluster
30	20000	9812345678	D.Tech	5	1
40	40000	98	B.E	4	2
20	50000	9912345678	D.S.T	1	3
31	210000	98	B.Tech	6	4
			30+		

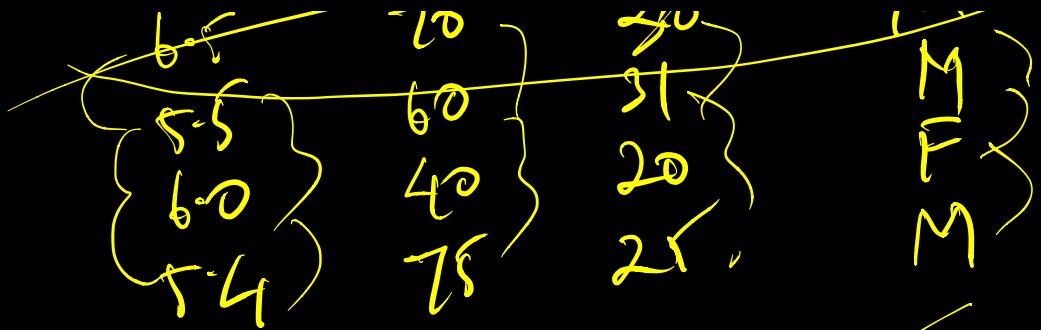
doubt

now

I/P	Height	Weight	Age	O/P	Gender
	6.5	85	30	M	
	5.5	70	31	F	
	5.5	80	25	M	
	6.0	80	30	F	
	5.6	60	25	M	



I/P	Height	Weight	Age	Gender
			25	M



algorithm  
pattern  
 $\downarrow$  2 Cluster

- ~~O/P~~
1.  $\rightarrow$  1 cluster
  2.  $\rightarrow$  1 cluster
  3.  $=$  2
  4.  $=$  1 cluster
- UnSupervised