K Means Clustering

→ UN SUPERVISED

↓

x , y x

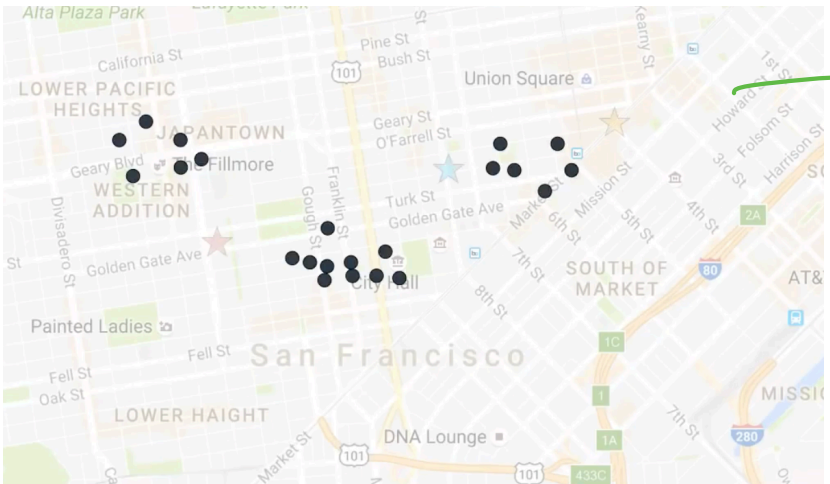
→ Clustering.. group similar type of data together.

Supervised

→ Regression

→ Classification

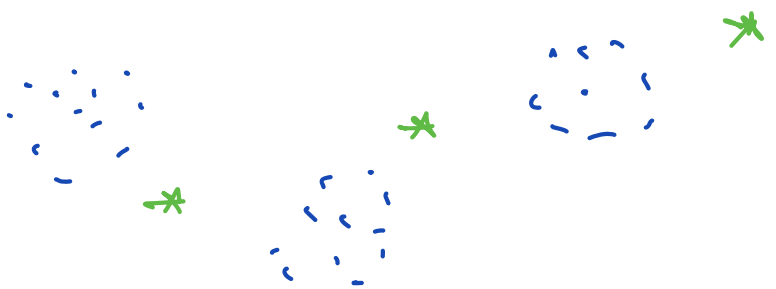
- LOG. REG
- NB
- SVM
- NN
- DT



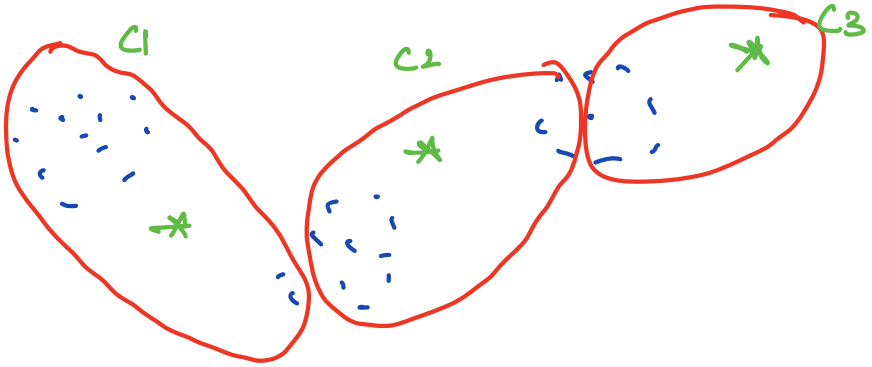
→ location of people from where pizza is ordered frequently.

(1) Randomly initialize 3 center points

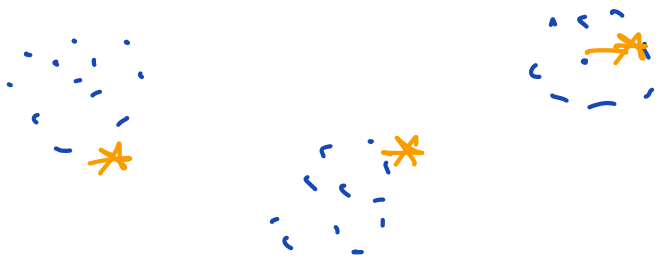
↳ center of clusters.



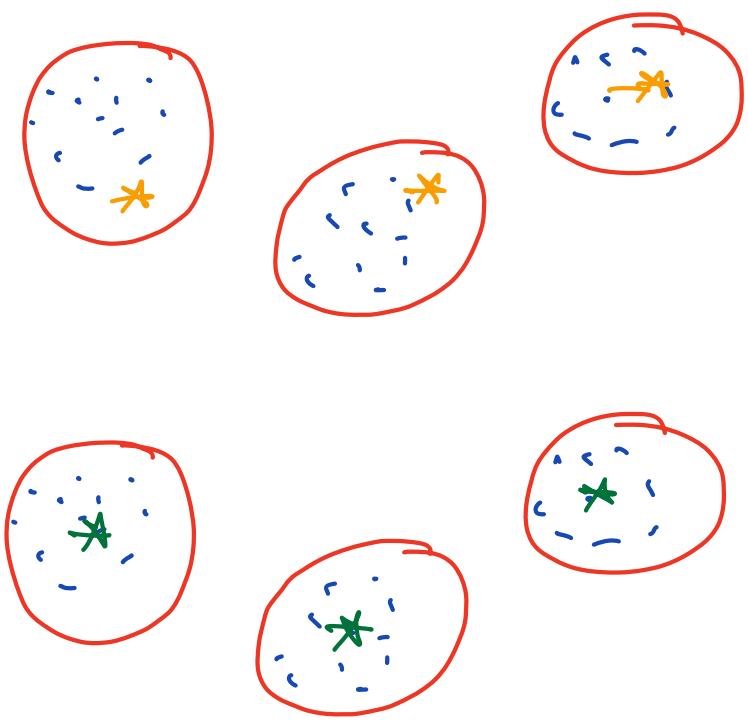
(2) Assign each customer to its nearest pizza outlet.

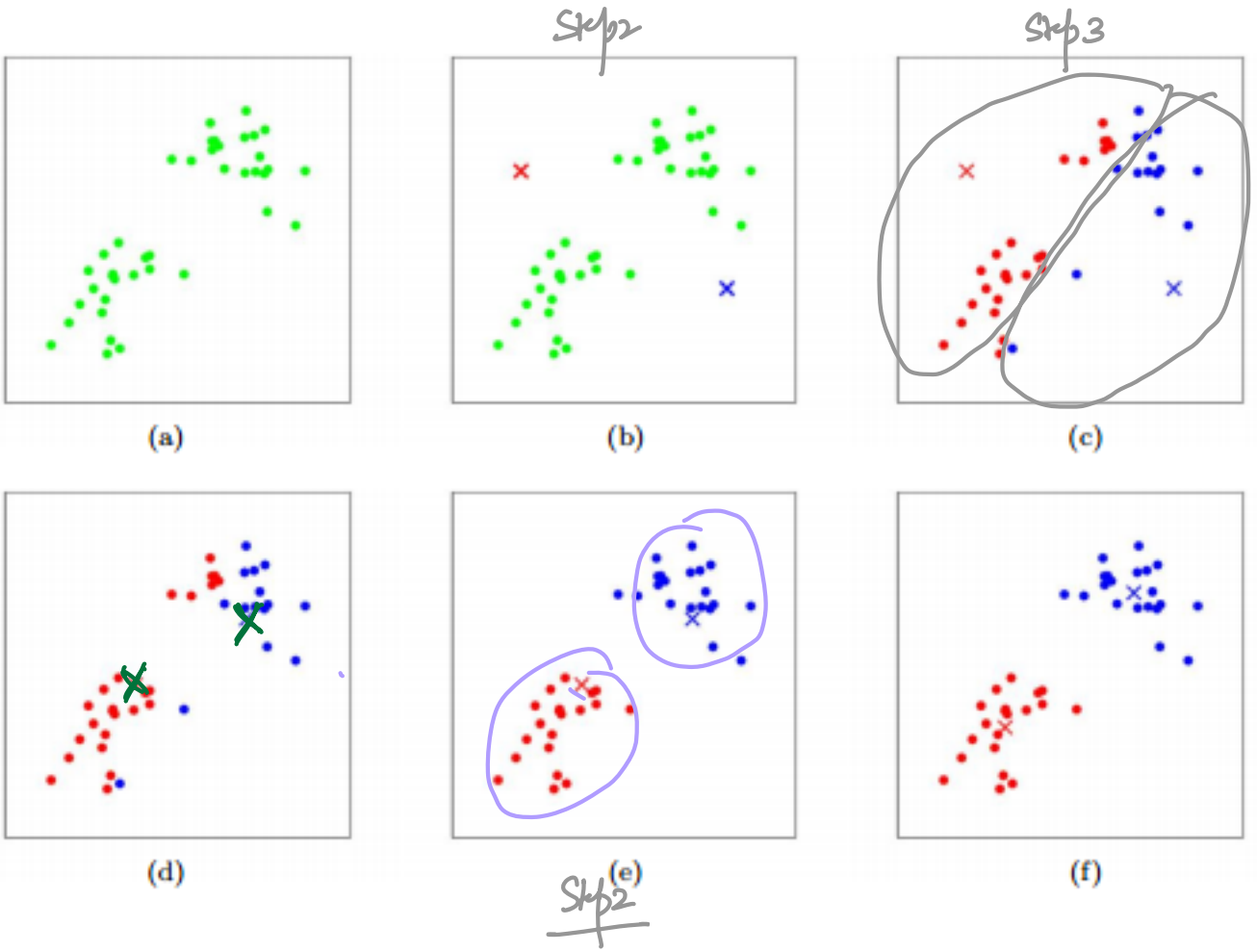


(3) Update the center locations by taking the mean of points assigned to it.



Step 2 & 3 repeatedly





Euclidean Distance :-

(x_1, y_1) (x_2, y_2)

$$\sqrt{(y_2 - y_1)^2 + (x_2 - x_1)^2}$$

Elbow

Kmeans++

Eh