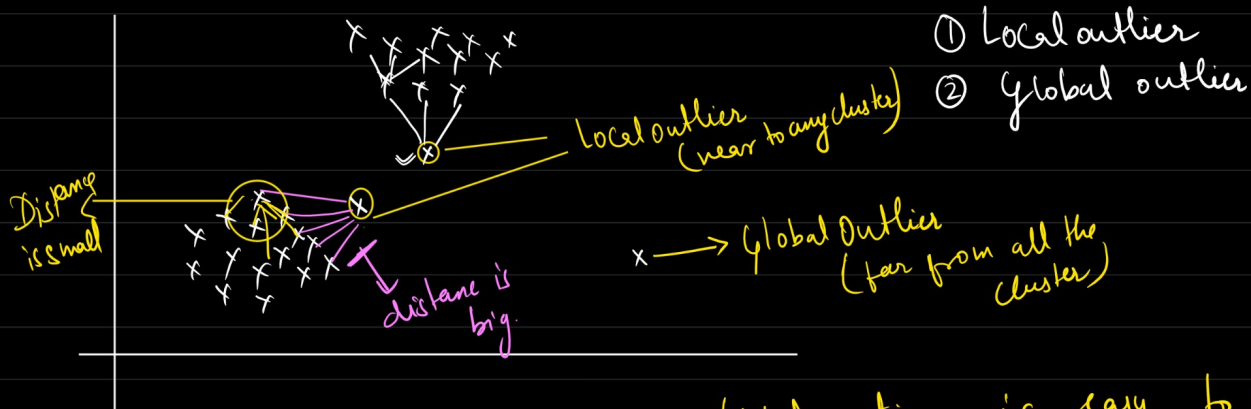


# Local outlier factor Anomaly detection



→ Global outlier is easy to detect using Isolation forest / DBSCAN.

→ How to detect local outlier?

→ Using Local outlier factor.

||  
local density - Using KNN.

\* Calculate distance of a dp with its k-nearest neighbour.

\* dp's which are far will have more distance from its neighbours. and vice-versa

\* Higher distance → density less ⇒ Outlier

LOF score ⇒  $\frac{dp \text{ of Interest distance}}{\text{All dp's distance}}$

⇓  
→ threshold ⇒ outlier.