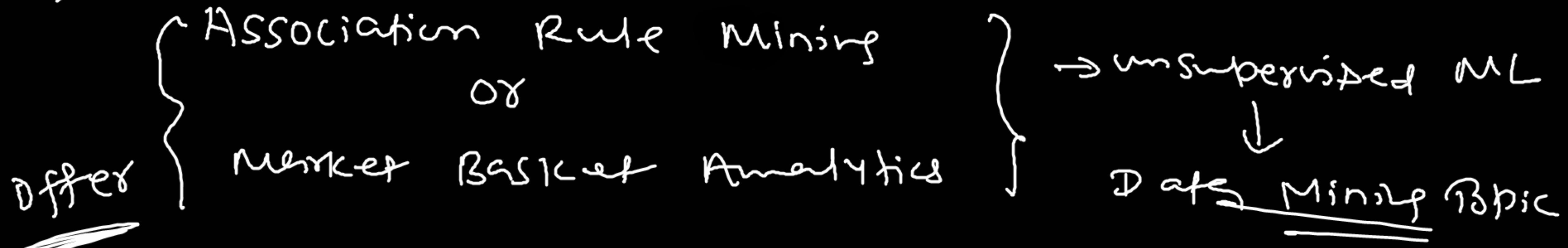


Recommendation module

You are screen sharing Stop Share



There is no prediction. We don't have Dep.

(Variables)

List = 10 item

A + B = Offer

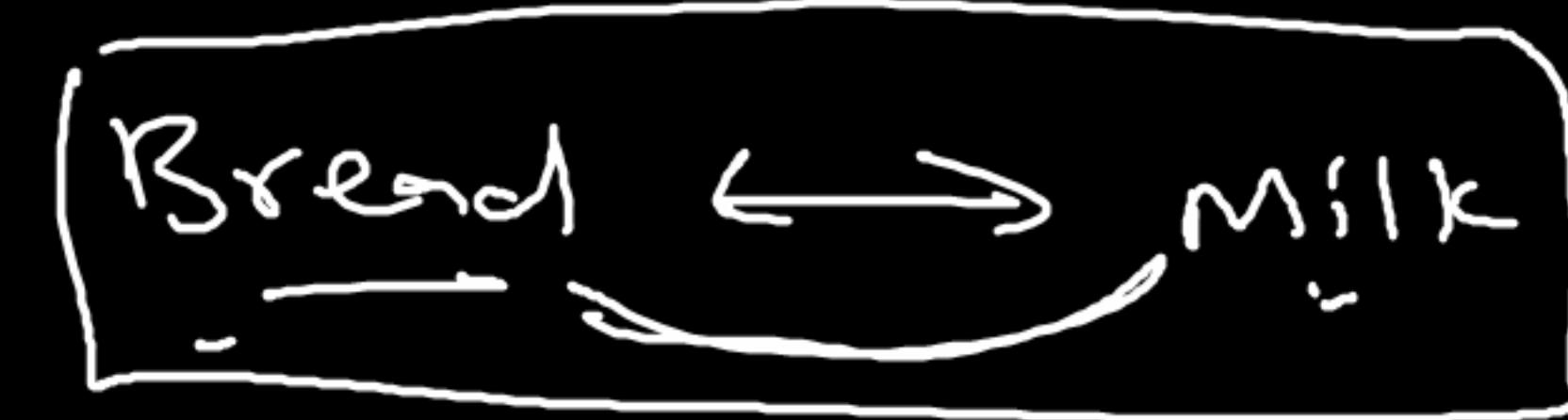
→ to items

6 Pcs A → B - % discount
I Pauch Market - Chester
free

Support :- it is all about finding out the most frequent combination that are there in the data support.

$$\frac{P(B \cap B)}{\text{Total No. of Trans}} = \frac{40}{100}$$

$$40 = 40\%$$



$$\begin{array}{c} 100 \\ \text{LHS} \rightarrow \text{RHS} \\ 40 - 40\% \end{array}$$

NOTE :- Greater the Support, better the chances of it happening in future so my decision will prioritize combination which have greater support.

Confidence :- How confident am I about

Given how often

the stem \hookrightarrow What is the Probability of RHS happening
X & Y occurs together, given LHS has already happened?

No. of times

X occurs

$$\frac{P(\text{LHS} \text{ & RHS})}{\text{Total LHS}} = \text{Confidence}$$

Total LHS

Lift - indicates the strength of a rule over
the random co-occurrence of $X \& Y$.

↓ is the fitted model. Even after having acceptable
occurrence (i.e. high support) & acceptable confidence,
it can happen that a particular combination -
sharing occurrence just because of random chance.
We have to see if they are really correlated or
the occurrence is just random by chance.

$$\text{Lift} = \frac{P(A \& B)}{\text{Total No. of Transactions}}$$
$$\frac{P(A) * P(B)}{\text{Total Trans.}}$$

NOTE: if lift value is more than 1, only then you can accept the model & provide offer.