Experiment- 6

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Aim : Implementation of association rule mining using Apriori and FP tree.

Theory : Association rule learning is a type of unsupervised learning technique that checks for the dependency of data item on another data item & maps accordingly so that it can be more profitable.

Apriory Algorithm.
It focuses on identifying frequent itemsets, which one subsets of items that are frequently co-occur in transactions.
The steps are :-

① It generates general candidate itemsets.
② It generates frequent candidate items sets.
for size 1 to n (n being till the frequency is less than minimum support)
③ We generate rules on the basis of minimum confidence

FP tree (Frequent pattern Tree)
It is an alternative approach to apriori and is used for efficient mining. It represents the transaction database in the form of a structure which allows for more efficient counting of item support.
The steps are :-
Constructing fp tree by stating him most frequent ones.
Building a conditional pattern database

(3) Recursively mining the conditional pattern to discover frequent itemsets.

Conclusion : Thus we have successfully implemented apriori and fp tree algorithm.