**Que 1.) Give and example where you can apply the Apriori algorithms.**

**Ans)** The Apriori algorithm is used for mining frequent itemsets and devising association rules from a transactional database. The parameters “support” and “confidence” are used.

**Examples**

* Market Basket Analysis

Many e-commerce giants like Amazon use Apriori to draw data insights on which products are likely to be purchased together and which are most responsive to promotion. For example, a retailer might use Apriori to predict that people who buy sugar and flour are likely to buy eggs to bake a cake.

* Auto-Complete Applications

Google auto-complete is another popular application of Apriori wherein - when the user types a word, the search engine looks for other associated words that people usually type after a specific word.

**Que 2.) What happens when we decrease the support level? Why?**

**Ans.)**

Support: It gives the fraction of transactions which contains item A and B. Basically Support tells us about the frequently bought items or the combination of items bought frequently.

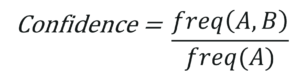


So, we can filter out the items that have a low frequency.

When support level decreases, the popularity of the item set decreases.

**Que 3.) What happens when we increase the confidence level? Why?**

**Ans.)** Confidence: It tells us how often the items A and B occur together, given the number times A occurs.



When we increase the confidence level of a transaction, then we tend to increase the probability of that itemset to be transacted with the other itemset.

**Que 10.) What recommendations would you give to the owner of the bakery?**

**Ans.)** Recommendations:

1. Combo of items like cake-coffee and pastry-coffee should be introduced as they in demand.
2. Need not to recommend brownie with bread.
3. Items should be available in bulk because from morning till evening huge number of people come.