Lab Assignment

NOTE: Implement the problems using C ++/JAVA, the datasets are attached with mail.

Practice: Write program for the problem discussed in class.

1. Implement Apriori algorithm for association rules. Run the algorithm with two different support and confidence level defined by you.
    (Chees, Mushroom, Retail dataset can be used.)

- Print frequent itemset.
- Print closed frequent itemset.

2. Implement Apriori algorithm for association rules using **hash function**. Run the algorithm with two different user defined support and confidence level to find frequent item sets from L_2 and C_2.
    (Chees, Mushroom, Retail dataset can be used.)

3. Consider a set of items from the alphabet: **{A, B, C, D, and E}** and the collection of frequent sets

$$S = \{\{A\},\{B\},\{C\},\{E\},\{A,B\},\{A,C\},\{A,E\},\{C,E\},\{A,C,E\}\}$$

Find negative and positive collection of frequent sets.

4. Use partitioning to divide a data set in two partitions. Apply Apriori algorithm and compare the frequent pattern results between integrated and partitioned data sets.

Note: Let $Y \subseteq I$ and
    $X \subseteq Y$
If the X is an *infrequent* itemset, then Y is also an infrequent itemset. On that basis apply the Apriori algorithm.