

### Lab Statement 7

- (1) Extend the Apriori Algorithm discussed in the class supporting Transaction Reduction approach to improve the time complexity issue as a result of the repeated scans limitation of Apriori. You may compare this extended version with the earlier implementations in FP Growth over the same benchmark dataset.
- (2) Test drive any one implementation in FP growth or Transaction Reduction adopting a Vertical Transaction Database format.
- (3) Using a vertical transaction database notation, generate the FI's following the intersection approach (basic ECLAT) discussed in the class. Use benchmark datasets in FIMI.
- (4) Extend the basic Apriori algorithm to generate Frequent Patterns which differentiate ab from ba (ordered patterns generation).
- (5) Implement the Dynamic Itemset Counting Algorithm for Frequent Itemset Generation.