**Market Basket Analysis**

**Abstract:**

Market basket analysis finds out customers’ purchasing patterns by discovering important associations among the products which they place in their shopping baskets. It not only assists in decision making process but also increases sales in many business organizations. Apriori and FP Growth are the most common algorithms for mining frequent itemsets. For both algorithms predefined minimum support is needed to satisfy for identifying the frequent itemsets. But when the minimum support is low, a huge number of candidate sets will be generated which requires large computation. In this paper, an approach has been proposed to avoid this large computation by reducing the items of dataset with top selling products. Various percentages of top selling products like 30%, 40%, 50%, 55% have been taken and for both algorithms frequent itemsets and association rules are generated. The results show that if top selling items are used, it is possible to get almost same frequent itemsets and association rules within a short time comparing with that outputs which are derived by computing all the items. From time comparison it is also found that FP Growth algorithm takes smaller time than Apriori algorithm.