Abstract

The pattern growth approach of association rule mining is very efficient as avoiding the candidate generation step which was utilized in Apriori algorithm. Here, revisited of the pattern growth approaches are done to improve the performance using different criteria like item search order, conditional database representation and construction approach and tree traversal ways. The header table construction is the first part in almost all the approaches having constant number of dataset items. This research is representing the reduction in overall memory requirement of pattern growth approach by reducing the search space and processor operations time at the header table generation. It is proposed to achieve the memory cutback by only considering the items that are going to be frequent and ignoring the infrequent items at early stage of scan, by considering the boundary. Experimental analysis achieves cutback in memory consumption in the proposed approach Modified FP-Growth (MFP-Growth) compare to FP-Growth and CFP-Growth.

**Index Terms**

- Computer Science
- Data Mining

**Keywords**

- Association rule mining
- FP-Tree
- pattern growth