ABSTRACT

Generally, large databases potent to hide a lot of high valuable information. The information can be obtained by paying attention to repeatly accuring patterns. Frequent Pattern is one of important recuring pattern type in data mining.

Getting frequent pattern from large databases needs big enough cost. Therefore an efficient algorithm is necessity. FP-growth and Tree Projection are mining frequent pattern algorithms which have good performance. FP-growth is an efficient algorithm since not require generation of candidate frequent pattern, while Tree Projection is generating candidate frequent pattern algorithm which have good performance. to know ability and also the advantage and disadvantage of the algorithm each other, need study of comparison of complexity and performace algorithm.

In this final project will be conducted comparison study of complexity and performance FP-growth and Tree Projection algorithms. For performance analyse requirement of both algorithms, then would be builded a software for implementing Tree Projection and FP-growth algorithms.

Based on experiment result, the complexity of FP-growth and Tree Projection effected by frequent items number. Both algorithm performance opposite ratio with minimum support threshold. FP-growth performance is better than Tree Projection when the minimum support getting smaller, and Tree Projection getting closer even better then FP-growth when the minimum support threshold is higher.

Keyword : data mining, association analysis, frequent pattern, minimum support , FP-growth, TreeProjection