ABSTRACT

With the widespread computerization in business, government, and science, the efficient and effective discovery of interesting patterns from large databases becomes essential. Data mining emerges as a solution to the data analysis probems faced by many organization. One of data mining functionality is association that is finding association rule which meet minimum support and minimum confidence value. Previously data mining have been focused on the discovery of knowledge at a single conceptual level. However, it is often desirable to discover knowledge at multiple level, which will provide a needed information, from general to specific solution.

In this final project will be implement top-down progressive deepening with ML-T2L1 algorithm to find frequent itemset and multiple-level association rules at multiple conceptual level and will be analysis about performance algorithm consider number of transaction, size of database, minimum support, minimum support, number of level to time for discoverying solution and number of solution found.

Minimum support and minimum confidence value can influence performance of software. If value of ever greater support define in level-1 hence the time for forming of frequent itemset smaller to the next level and greater minimum confidence hence number of association rule is formed smaller. The raising of transaction number influence time for generating frequent itemset dan association rules. Ever greater number of transaction hence the time for forming frequent itemset and association rule become smaller.

Keywords: data mining, multiple-level association rules, frequent itemsets, top-down progressive deepening, ML-T2L1algorithm