CHAPTER 8

CONCLUSION AND FUTURE ENHANCEMENTS

8.1 Conclusion

This thesis addresses the necessity of finding frequent patterns in the data mining. Problems related to frequent pattern mining have been analyzed and found a better solution for it. Basically Apriori algorithm is used to find the frequent patterns available in the database. Initially the thesis work starts with the proposed AprioriAllHybrid algorithm for mining a frequent pattern which performs better when compared to Apriori algorithm and it have been proved by taking various size of database.

The association rule generated by Apriori algorithm is optimized using genetic algorithm and then a parallel algorithm has been proposed which is efficient and proved with some sample data, but the disadvantage is cost. Finally partition algorithm have been proposed, in this approach control will move to the particular partition instead of scanning the entire database.

Massive experimentation work was performed for evaluating and comparing Apriori, AprioriAllHybrid and Partition algorithms. This thesis concludes that the proposed partition algorithm approach consistently performs well than rest of the algorithm and will support many future researches in many ways.


8.2 Future Enhancements

In this thesis, a new efficient algorithm has been proposed for mining frequent patterns in massive datasets. However, different data items have different formats, so there is no universal solution for this problem. The partition algorithm proposed in this thesis can be further improved in different perspectives. The future enhancements will focus on,

- At present, this algorithm takes only table as input, which contains only text, and this can be improved by allowing any type of inputs.

- Association rule generated can be effectively optimized using GA or some other techniques, so that only strong rules will be obtained which improves the effectiveness of the algorithm.

Thus the algorithm can be enhanced in different aspects, which helps to improve the performance of the algorithm. By incorporating all the mentioned enhancements in the proposed system, an efficient, effective and intelligent method for mining frequent patterns can be developed.