Large Amount of data is being using very rapidly in the world. It to be compressed takes much more time and takes lot of effort to process these data for knowledge discovery and decision making. Data compression technique is one of good solutions to be reduce size of data that can be save more time the time of discovering useful knowledge by using appropriate methods, for example Data mining. Data mining is used to help users discover interesting and useful knowledge more easily to decision making purpose. It is more and more popular to apply the association rule mining in recent years because of its wide applications in many fields such as stock analysis, web log mining, medical diagnosis, customer market analysis and bioinformatics. In this paper the main focus in on association rule mining and data pre-process with data compression. In this paper we analysis the methods simple Apriori, Partion based Apriori and Apriori with compressed dataset. We compare these three methods on the basis of minimum support, minimum confidence, number of records and execution times.

**Index Terms**

Computer Science  
Information Sciences
Keywords

Association rule, Apriori Algorithm, merged transaction, quantification table.