

**ANALYSIS OF LOANING BOOKS PATTERN USING
MULTIDIMENSIONAL ASSOCIATION RULE WITH
APRIORI ALGORITHM**

(Study Case : Islamic University of Indonesia Central Library)

ABSTRACT

The Center Library Islamic University of Indonesia is a library that integrates the collection of several Library faculties. The Center Library Islamic University of Indonesia have information systems in the form of a database, one database transaction loaning books, but that database is experiencing a buildup of a lot of information and data to be obtained as well as beneficial in decision making. The final task of this research aims to know the description of the amount of borrowing and lending patterns to know the book resulting from the existing data. The data used are secondary data from data on loan books in the library of the Centre of Islamic University of Indonesia year 2017. Methods of analysis used descriptive statistics and multidimensional association rule with the apriori algorithm. Based on the research results obtained the highest number of book loaning transactions occurred in September and acquired 23 rules of association that are formed with a value of 0,0001 and confidence support 0,8. The results of the association formed can be used by Directorate of Indonesian Islamic University Library to increase the number of books by book category.

Key words: Center Library, Islamic University of Indonesia, Loaning Books, Multidimensional Association Rule, Apriori Algorithm.