Abstract

Information Retrieval is one study field of computer science that studies about searching mechanism in order to obtain the right information. This mechanism includes indexing, searching, and data recalling processes. One basic concept of information retrieval is the indexing process. It is a process to build the word list in the document collections in order to simplify the searching process using query. Single Pass in Memory Indexing (SPIMI) method is one example of indexing methods used in information retrieval which allows inverted index building process to be done in the memory and in the disk. Analysis and implementation are done for this final project in order to determine the SPIMI method's performance. Parameters used are merge factor and the size of RAM. In conclusion, the result from implementing SPIMI method shows that the value of merge factor and the size of RAM are directly proportional to the value of time performance.

Keywords: *information retrieval, indexing, SPIMI method, merge factor, and* RAM *size.*