## **Abstract**

The process of ranking a web page has an important role in an information retrieval system on the web page. From this ranking process will result a recommendation from the makers of the system to the users of the system about what pages which are referred by many others web page in hopes the more a web page is cited by another web pages, the information contained on that web page will be more important. This ranking process is done by using the principle of link analysis. Link analysis is the process of ranking a web page based on the information contained within these link or also called the recommendation of the document's authors to another web page. But the principle of link analysis is still considered a webpage as the smallest unit in the development of web graph, so the links on the same web page will get the same weight regardless of the location of the link on the web page. By using the method of block level link analysis, a link on a web page will have different weights with the other links based on the size and location of links on a web page. In this final project, Block Level PageRank which is the implementation of the block level link analysis method is used. From the test results obtained that the number and location of incoming links to a webpage can affect the ranking of the destination web page in the document collection. It can be seen that the web pages referenced by more number of incoming links and located on the block with the greater weight will be ranked better than the web pages referenced by less number of incoming links and located on the block with smaller weights.

Keywords: link analysis, Block Level PageRank