ABSTRACT

Data Partitioning is a technique for placing data in the form of table or index page into separate partitions in a single or multiple filegroup. With this feature, we can divide the data (usually large size) into units that can be spread across more than one filegroup in a database. This division will result in improved performance during the process of querying the data or at the time of the transaction data.

On the table are very large (number of rows very much) then partitioning helps to split a large data into multiple smaller partitions so easily manageable. Making partitions enables better performance through parallel database.

In this final project has been implemented using a parallel database architecture using data partitioning.From this final result can improve database performance in a system with the amount of data is very large such as data on students in a campus.

Based on the comparison between the query processing in a system with data partitioning and without the data partition, query processing on any one scenario tested, the results are much better than single CPU scenarios, from the number of transactions carried out for 30 minutes is 542 versus 118 and average - average response time is much faster, 18.645 and 31.038.

***Keywords**: Database, Oracle, Parallel Database, Data Partition*