ABSTRACT

Data compression is a technique to minimize data so that files can be obtained with a size smaller than the original file size. Compression is needed to refresh the data storage space so that more efficient. In addition, data compression can speed up data transmission, and bandwidth requirements. Along with the development of increasingly sophisticated devices, causing the size of the data generated continues to increase and grow larger. This is very important and requires longer time data. Therefore, data compression techniques are required to resize a file or document into smaller ones so that it can be less and can shorten the time data.

In this final project, a comparative modification of text data using Huffman, Run Length Encoding, and Tunstall methods is used to analyze and compare the effectiveness of each method in encoding various types of text data.

From the test results and analysis obtained, that on the type of data that has a recurring character, Run Length Encoding method has a higher ratio value than the Huffman and Tunstall method that is with the value 54.875 in *.txt and 54.696 formats in *.docx format. While on the data in the form of articles or a reading, Huffman method has a higher ratio value than the Tunstall and Run Length Encoding method is 57.560 with the format *.txt and 57.137 in *.docx format.

Keywords *: File, Bandwidht, Huffman, Run Length Encoding, Tunstall.*