

ABSTRACT

As the data format that processed within computer has been growth, the bigger data size is concerned. Large size data require more space in storage, and it will take too much time when it transferred with other users in computer's network. In spite of this, it is need to compress the data so it will minimize the size of data that used.

In This final duty, will be tested and compared three compression algorithms, those are Huffman Algorithm, LZW Algorithm, and Deflate Algorithm. All of those algorithm will be implemented into two software first is compression software and the second is image viewer from server to client software, both will be tested into several group test, performances that measured are compression speed, decompression speed and compression ratio.

The implementation result shows, Deflate produce the best average compression ratio with 401,2%, followed by LZW with 240,2% and Huffman with 146,9%. Base on compression speed, Huffman gain the top position with average compression speed 6.560,3 Kbyte/s, followed by Deflate with 1.833,7 Kbyte/s and LZW with 483,6%. Meanwhile, base on decompression speed, Deflate produce average decompression speed up to 17.653,5 Kbyte/s, followed by Huffman with 7.790,8 Kbyte/s and LZW with 622,4 Kbyte/s.

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