ABSTRACT

Growing demand of Short Message Services (SMS) with limited numbers of characters, so the users don't have flexibility to using this feature. Maybe this is the side cause if the numbers of characters more than 160 characters that make the bandwidth bigger and the traffic more crowded. Therefore, to maximize the numbers of characters that can be used the compression technique is needed by using Arithmatik coding, Huffman coding, and LZW coding.

In the research the encoder and the decoder will be deployed with Aritmatik coding, Huffman coding, and LZW coding. And the software that will be use to make this application in mobile phone to do the compression and can be send as Short Message Services is java.

The purpose of this research is to compare the ratio compression between Aritmatik coding, Huffman coding, and LZW coding. The application will implement to the mobile phone. And hopefully the result of compression will be 50% from the originals data.

Keywords: *SMS, LZW*