# Abstract

In the telecommunications world today, the limited bandwidth is a very important issue at the time of the digital image data stored or transmitted. To overcome this, developed techniques of digital image data compression which is a technique to minimize the number of bits that represent a digital image data and decompression techniques of digital image data is compressed to recover digital image data has been compressed.

In this final task, the method applies a combination of methods of Lempel-Ziv-Welch (LZW) - Arithmetic Coding (AC) which is lossless compression. By combining these two methods is expected to produce a compression ratio greater than the compression ratio of only using the LZW method. To determine the performance of this system, do the calculation results of the compression ratio of the original image.

Keywords: Digital Image, Lempel-Ziv-Welch (LZW), Arithmetic Coding (AC), lossless compression, ratio