CHAPTER 1 INTRODUCTION

1.2 Background

Digital imagery is an image or similarity of an object recorded by an electronic device. Studying digital image processing is very useful in improving imagery or wanting to make the image look interesting to see. One of the things learned in digital processing is segmenting or separating objects with the background. In segmenting there are many examples of algorithms that can segment, for example Thresholding algorithms and Morphological algorithms.

In segmentation, of course, must determine the algorithm that has a low error rate and maximum image level. To find out this, PSNR (Peak Signal to Noise Ratio) and MSE (Mean Square Error) tests are provided.

PSNR and MSE are parameters commonly used as indicators to measure the similarity of two images. The better the image, the value in MSE is close to 0 while for PSNR it is said to be good if the value is above 30 dB. To know the final result, a table will be created so that the value of the 2 algorithms can be known.

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1.3 Scope

The scope of this research :

- 1. Can separate objects with background using Thresholding and Morphological (Closing) algorithms.
- 2. Can compare Thresholding algorithm with Morphological Closing with PSNR and MSE parameters.

1.4 Objective

The objectives that will be achieved from this project are:

Get algorithms that match MSE conditions close to 0 and PSNR above 30 db.

