CHAPTER 3
RESEARCH METHODOLOGY

The research process is divided into 6 stages, namely:

3.1 Library Studies

It is the stage of finding references through books, journals and the internet to gain understanding and knowledge about improving image quality using histogram equalization and contrast stretching methods.

3.2 Analysis

The activity carried out at this stage was to analyze the application of histogram equalization and contrast stretching to digital media from various references from journals and supporting books.

3.3 Design

The design of this application is designed to apply the histogram equalization and contrast stretching methods to improve image quality that follows the process as below.

Illustration 3.1: The Processing works.
3.4. Implementation

This stage applies the results of the design stage by making the program code according to the algorithm that the author applies, that is histogram equalization and contrast stretching. Encoding uses java which is applied to the GUI.

3.5 Testing

This stage was carried out to test histogram equalization and contrast stretching on improving the quality of digital images. The test was done by comparing images after histogram equalization and contrast stretching on the image.

3.6 Making Final Report

This stage is to report the Histogram Equalization and Contrast Stretching method in digital image quality improvement.