CHAPTER 1
INTRODUCTION

1.1 Background

Department of informatics engineering at the Soegijapranata Catholic University store data of student's grade every semester. The data consist of student number (nim), subject code, grade, year and semester. All this data are store in database. Which will be process to get student GPA. But those data are never analyzed, because it is difficult to process all the raw data.

Therefore needed a program to simplify data processing of student's grade using statistics formulas. The data structure used is linkedlist which store data of student's grade. After the student's grade are stored in data structure, the data will be calculate using statistics formulas. This program will be represent the raw data with graph visualization. By using this progam, informatics engineering department will be helped while processing and reading the data of student's grade in each course. And it can be used to make a decision.

1.2 Scope

The scope of this program are :

1. The data which is used in this program is the student's grade data in department of informatics engineering at Soegijapranata Catholic University.
2. This program can calculate the statistics of mean, median, mode, standard deviation, skewness, and kurtosis.
3. This program can change the raw data into a graph visualization.
4. This program can analyze the results of the statistical calculation.

1.3 Objective

The objective of this program is to facilitate reading data of student's grade in each course. This program can complete statistics calculations, represent the raw data into graphs, and analyzing the final results of statistics.