

CHAPTER I

INTRODUCTION

1.1 Background

A compiler is a computer program (or set of programs) that transforms source code written in a programming language (the source language) into another computer language (the target language, often having a binary form known as object code)¹.

Based on the explanation above, writer want to make a simple compiler to execute C language program use Java language. In this simple C compiler, writer also provide three tutorials of C coding programs, there are print hello world, basic variables and operator and also loop, so users can also learn coding how to make a program in C language. Beside that, writer also show the result of each step of parsing , so users can also know result of every steps of their program.

1.2 Scope

This program was created using Java language programming and use JSP (Java Server Page) as the interface, use tree and array as the data structure and parsing as the step for checking and show the final result. Problem limitation in this project are:

1. C tutorial that provided are only in 3 type, there are simple print words, variable and operator, and the last is simple loop program.
2. The tutorial could be edited before precessed using parsing algorithm and can't be edited after the parsing process.
3. Only can process integer data type.
4. This compiler also can only process first line on loop and can't do double loop

1.3 Objective

This program was created using Java language to execute the C program language, JSP as interface and parsing algorithm to check the syntax program and execute the source code.

The purpose of this program is to execute C language use different language, in this case is using Java language, and users also could know result from every step in compiler.

¹ <http://en.wikipedia.org/wiki/Compiler>