

ABSTRACT

A programming language is a notation for expressing instructions to be carried out by a computer. It is a medium of communication between human and the machine.

A programmer to make a program needs an understanding of the syntax of the programming language he uses since computer does not tolerate an error. To avoid ambiguity, syntax rules themselves must be written in a very simple, precise, formal language called a metalanguage. There are some metalanguages, i.e., syntax template, syntax diagram, and Extended Backus-Naur Form (EBNF).

This thesis deals with the syntax of Pascal- a programming language designed by the Swiss computer scientist Niklaus Wirth in the late 1960s. To describe the syntax rules of Pascal, the writer uses EBNF.

After analyzing the syntax of Pascal language through some programs written in it, the writer finds out that the programs of Pascal consist of program heading, declaration part, and executable statements that form statement part. Statement part is marked by the word BEGIN in initial position and END followed by a (.) period in final position.

The EBNF description of Pascal program is:

```
<pascal-program> ::= <program-heading> <declaration-part> BEGIN <statement-
part> END".
```

CHAPTER I

INTRODUCTION