

CHAPTER IV

CONCLUSION

After analyzing the structure of Pascal language through the programs written on it, finally I can conclude that a program of Pascal consist of program heading, declaration part, and executable statements that form statement part. The syntax rule of Pascal program is:

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

The syntax rule for program heading is

```
<program-heading> ::= PROGRAM <identifier> [<file-name-list>];
<file-name-list> ::= <file-name> | <file-name-list>, <file-name>
<file-name> ::= <identifier>
```

These are the rules of declaration part.

```
<declaration-part> ::= <constant-definition-part> | <type-definititon-part>
                    | <variable-definition-part> | <procedure-
                    declaration-part> | <function-declaration-part>
<constant-definition-part> ::= CONST <constant-definition> ";" {<constant-
definition> ";" }
<constant-definition> ::= <identifier> "=" <constant>
<constant> ::= [<eign>] (<constant-identifier> | <number>) | <string>
<constant-identifier> ::= <identifier>
```

<function-identifier> ::= <identifier>
<expression> ::= <simple-expression> [<operator> <simple-expression>]
<operator> ::= "=" | "<" | ">" | "<=" | ">=" | "+" | "-" | "" | "/" | div | mod
<simple-expression> ::= <variable> | <number>
<procedure-statement> ::= <procedure-identifier> [<parameter-list>] ";"
<procedure-identifier> ::= <identifier>
<parameter-list> ::= <constant> <parameter-list> | <variable>
<parameter-list> | <function-identifier> <parameter-
list> | <expression> <parameter-list>
<if-statement> ::= IF <expression> THEN <statement>
[ELSE <statement>]
<case-statement> ::= CASE <case-selector> OF <case-label-list>
<statement> | (BEGIN <statement-sequence> END) ";" END";
<case-selector> ::= <expression>
<case-label-list> ::= <constant> {" <constant>}
<while-statement> ::= WHILE <expression> DO (<statement> |
<statement-sequence>);
<repeat-statement> ::= REPEAT <statement-sequence> UNTIL
<expression>
<for-statement> ::= FOR <variable-identifier> "=" <initial-expression> (TO |
DOWNTO) <final-expression> DO (<statement> | <statement-sequence>);
<with-statement> ::= WITH <record-variable> {" <record-variable>} DO
(<statement> | <statement-sequence>);
<record-variable> ::= <variable>

BIBLIOGRAPHY