MiniLanguage Grammar

G = ( N, E, P, S)

N = {

PROGRAM,

DECLLIST,

CMPDSTMT,

DECLARATION,

TYPE,

SNGTYPE,

ARRAYTYPE,

STMTLIST,

STMT,

SIMPLESTMT,

STRUCTSTMT,

ASSIGNSTMT,

IOSTMT,

EXPRESSION,

TERM,

FACTOR,

IFSTMT,

WHILESTMT,

CONDITION,

IDENTIFIER,

LETTER,

DIGIT,

RELATION

}

E= {

19,

20,

21,

22,

23,

24

25,

26,

27,

28,

29,

30,

31,

32,

33,

34,

35,

36,

37,

38,

39,

2 ,

3,

4,

5,

6,

7,

8,

9 ,

10,

11,

12,

13,

14,

15,

16 ,

17 ,

18 ,

}

S = program

P = {

PROGRAM -> 22 DECLLIST 3 CMPDSTMT .

DECLLIST -> DECLARATION | DECLARATION 3 DECLLIST

DECLARATION -> 0 2 TYPE

TYPE -> SNGTYPE | ARRAYTYPE

SNGTYPE -> 23 | 24 | 25

ARRAYTYPE -> 20 7 1 8 21 SNGTYPE

CMPDSTMT -> 26 STMTLIST 27

STMTLIST -> STMT | STMT 3 STMTLIST

STMT -> SIMPLESTMT | STRUCTSTMT

SIMPLESTMT -> ASSIGNSTMT | IOSTMT

ASSIGNSTMT -> 0 15 EXPRESSION

EXPRESSION -> TERM | EXPRESSION 9 TERM

TERM -> FACTOR | TERM 11 FACTOR

FACTOR -> 5 EXPRESSION 6 | 0

IOSTMT -> ( 28 | 29 ) (0 )

STRUCTSTMT -> CMPDSTMT | IFSTMT | WHILESTMT

IFSTMT -> 30 CONDITION 31 CMPDSTMT | 30 CONDITION 31 CMPDSTMT 32 CMPDSTMT

WHILESTMT -> 33 CONDITION 34 CMPDSTMT

CONDITION -> EXPRESSION RELATION EXPRESSION

}