1. <program> ===> <otherFunctions> <mainFunction>
2. <mainFunction>===> TK_MAIN <stmts> TK_END
3. <otherFunctions>===> <function><otherFunctions> | ∈
4. <function>===>TK_FUNID <input_par> <output_par> TK_SEM <stmts> TK_END
5. <input_par>===>TK_INPUT TK_PARAMETER TK_LIST TK_SQL <parameter_list> TK_SQR
6. <output_par>===>TK_OUTPUT TK_PARAMETER TK_LIST TK_SQL <parameter_list> TK_SQR| ∈
7. <parameter_list>===><dataType> TK_ID <remaining_list>
8. <dataType>===> <primitiveDatatype> |<constructedDatatype>
9. <primitiveDatatype>===> TK_INT | TK_REAL
10. <constructedDatatype>===>TK_RECORD TK_RUID | TK_UNION TK_RUID | TK_RUID
11. <remaining_list>===>TK_COMMA <parameter_list> | ∈
12. <stmts> ===> <typeDefinitions> <declarations> <otherStmts><returnStmt>
13. <typeDefinitions> ===> <typeDefinition><typeDefinitions>| <definetypestmt> <typeDefinitions> | ∈
14. <typeDefinition> ===>TK_RECORD TK_RUID <fieldDefinitions> TK_ENDRECORD
15. <typeDefinition> ===>TK_UNION TK_RUID <fieldDefinitions> TK_ENDUNION
16. <fieldDefinitions> ===> <fieldDefinition><fieldDefinition><moreFields>
17. <fieldDefinition> ===> TK_TYPE <dataType> TK_COLON TK_FIELDID TK_SEM
18. <moreFields> ===><fieldDefinition><moreFields> | ∈
19. <declarations> ===> <declaration><declarations> | ∈
20. <declaration> ===> TK_TYPE <dataType> TK_COLON TK_ID <global_or_not> TK_SEM
21. <global_or_not> ===> TK_COLON TK_GLOBAL| ∈
22. <otherStmts> ===> <stmt><otherStmts> | ∈
23. <stmt> ===> <assignmentStmt> | <iterativeStmt> | <conditionalStmt> | <ioStmt> | <funCallStmt>
24. <assignmentStmt>===><SingleOrRecId> TK_ASSIGNOP <arithmeticExpression> TK_SEM
25. <singleOrRecId>===>TK_ID <B>
26. <B> ===> TK_DOT TK_FIELDID <B> | ∈
27. <funCallStmt>===><outputParameters> TK_CALL TK_FUNID TK_WITH TK_PARAMETERS <inputParameters> TK_SEM
28. <outputParameters> ==> TK_SQL <idList> TK_SQR TK_ASSIGNOP | ∈
29. <inputParameters>===> TK_SQL <idList> TK_SQR
30. <iterativeStmt>===> TK_WHILE TK_OP <booleanExpression> TK_CL <stmt><otherStmts>TK_ENDWHILE
31. <conditionalStmt>===> TK_IF TK_OP <booleanExpression> TK_CL TK_THEN <stmt><otherStmts> <else> TK_ENDIF
32. <else> ===>TK_ELSE <otherStmts> | ∈
33. <ioStmt>===>TK_READ TK_OP <var> TK_CL TK_SEM | TK_WRITE TK_OP <var> TK_CL TK_SEM
34. <arithmeticExpression> ===> <addORsub>
35. <addORsub> ===> <mulORdiv> <ADDSUB> <addORsub> | <mulORdiv>
36. <mulORdiv> ===> <brackets> <MULDIV> <mulORdiv> | <brackets>
37. <brackets> ===> TK_OP <arithmeticExpression> TK_CL | <var>
38. <MULDIV> ===> TK_MUL | TK_DIV
39. <ADDSUB> ===> TK_PLUS | TK_MINUS
40. <booleanExpression>===>TK_OP <booleanExpression> TK_CL <logicalOp> TK_OP <booleanExpression> TK_CL
41. <booleanExpression>===> <var> <relationalOp> <var>
42. <booleanExpression>===> TK_NOT TK_OP <booleanExpression> TK_CL
43. <var>===> <singleOrRecId> | TK_NUM | TK_RNUM

44. <logicalOp>===>TK_AND | TK_OR
45. <relationalOp>===> TK_LT | TK_LE | TK_EQ |TK_GT | TK_GE | TK_NE
46. <returnStmt>===>TK_RETURN <optionalReturn> TK_SEM
47. <optionalReturn>===>TK_SQL <idList> TK_SQR | ∈
48. <idList>===> TK_ID <more_ids>
49. <more_ids>===> TK_COMMA <idList> | ∈
50. <definetypestmt>===>TK_DEFINETYPE <A> TK_RUID TK_AS TK_RUID
51. <A> ===>TK_RECORD | TK_UNION