**Complete Grammar (Natural Form)**

1. **<mainFunction>** ===> MAIN SQO SQC <stmtsAndFunctionDefs> END
2. <stmtsAndFuntionDefs>===> <stmtOrFunctionDef><stmtAndFunctionDefs>|<stmtOrFunctionDef>
3. <stmtOrFunctionDef>===> <stmt> | <functionDef>
4. <stmt>===> <declarationStmt> | <assignmentStmt_type1> | <assignmentStmt_type2> |<ifStmt>|<ioStmt>| <funCallStmt>
5. <functionDef>===>FUNCTION SQO <parameter_list> SQC ASSIGNOP FUNID SQO <parameter_list> SQC <stmtsAndFunctionDefs> END SEMICOLON
6. <parameter_list>===><type> ID <remainingList>
7. <type>===> INT | REAL | STRING | MATRIX
8. <remainingList>===>COMMA <parameter_list> | ∈
9. <declarationStmt>===> <type> <var_list> SEMICOLON
10. <var_list>===> ID <more_ids>
11. <more_ids>===> COMMA <var_list> | ∈
12. <assignmentStmt_type1>===> <leftHandSide_singleVar> ASSIGNOP <rightHandSide_type1> SEMICOLON
13. <assignmentStmt_type2>===> <leftHandSide_listVar> ASSIGNOP <rightHandSide_type2> SEMICOLON
14. <leftHandSide_singleVar> ===> ID
15. <leftHandSide_listVar> ===> SQO <var_list> SQC
16. <rightHandSide_type1> ===> <arithmeticExpression> | <sizeExpression> |<funCallStmt>
17. <rightHandSide_type2> ===> <sizeExpression> |<funCallStmt>
18. <sizeExpression> ==> SIZE ID
19. <ifStmt>===> IF OP <booleanExpression> CL <stmt><otherStmts> ELSE <stmt><otherStmts> ENDIF SEMICOLON
20. <ifStmt>===> IF OP <booleanExpression> CL <stmt><otherStmts> ENDIF SEMICOLON
21. <otherStmts>===><stmt><otherStmts> | ∈
22. <ioStmt>===> READ OP ID CL SEMICOLON | PRINT OP ID CL SEMICOLON
23. <funCallStmt>===>FUNID OP <inputParameterList> CL SEMICOLON

(1)Changes and updates in Red color
(2)Added Missing Semicolons (Rules 5 and 20)
(3)Opertor Precedence imposed
(4)Changes also in accordance with the list added on 26th

24. <inputParameterList> ===> <var> <listVar> | ∈
25. <listVar> ==> COMMA <inputParameterList> |∈
26. <arithmeticExpression>===><arithmeticTerm> <operator_lowPrecedence> <arithmeticExpression> | <arithmeticTerm>
27. <arithmeticTerm>===> <factor> <operator_highPrecdence> <arithmeticTerm> | <factor>
28. <factor> ===> OP <arithmeticExpression> CL | <var>
~~<arithmeticExpression> ====> OP <arithmeticExpression> CL | <var>~~
29. <operator_lowPrecedence> ===> PLUS | MINUS
30. <operator_highPrecedence> ===> MUL | DIV
31. <booleanExpression>===> OP <booleanExpression> CL <logicalOp> OP <booleanExpression> CL
32. <booleanExpression>===> <constrainedVars> <relationalOp> <constrainedVars>
33. <constrainedVars> ===> ID | NUM | RNUM
34. <var>===> ID | NUM | RNUM | <matrixElement> | STR | <matrix>
35. <matrix>===>SQO <rows> SQC
36. <rows> ===> ><row> SEMICOLON <rows> | <row>
37. <row> ===> NUM <remainingColElements> | NUM
38. <remainingColElements> ===> COMMA NUM <remainingColElements> | ∈
39. <matrixElement>===>ID SQO NUM COMMA NUM SQC
40. <logicalOp>===> AND | OR | NOT
41. <relationalOp>===> LT | LE | EQ | GT | GE | NE

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