1-Number: (+|-)?[0-9]+( \. [0-9]+)?

2-String: “ (.|[0-9])\* ”

3-Reserved\_Keywords: (int | float | string | read | write |

repeat | until | if | elseif | else | then | return | endl)

4-Comment\_Statment: /\\* (.|[0-9])\* \\*/

5-Identifier: ([a-z]|[A-Z]) ([a-z]|[A-Z]|[0-9])\*

6-Function\_Call: Identifier\( (Identifier(,Identifier)\*)? \)

7-Term: (Number | Identifier | Function\_Call)

8-Arithmetic\_Operator: ( + | - | / | \* )

9-Equation: Term (Arithmetic \_Operator Term

|Arithmetic\_Operator

\( Term (Arithmetic\_Operator Term)+ \) )+

|

\( Term (Arithmetic\_Operator Term)+ \)

(Arithmetic\_Operator Term |

Arithmetic\_Operator

\( Term (Arithmetic\_Operator Term)+ \))\*

10-Expression: ( String | Term | Equation )

11-Assignment\_Statement: Identifier := Expression

12-Datatype: (int | float | string)

13-Declaration\_Statement: Datatype

(Identifier |Assignment\_Statement)

(,Identifier |,Assignment\_Statement)\*;

14-Write\_Statement: write (Expression | endl);

15-Read\_Statement: read Identifier ;

16-Return\_Statement: return Expression ;

17-Condition\_Operator: (< | > | = | <>)

18-Condition: Identifier Condition\_Operator Term

19-Boolean\_Operator: (&& | \|\|)

20-Condition\_Statement: Condition

(Boolean\_Operator Condition)\*

21-If\_Statement: if Condition\_Statement then

Set Of Statements

(Else\_If\_Statement| Else\_Statement | end)

22-Else\_If\_Statement: elseif Condition\_Statement then

Set Of Statements

(Else\_If\_Statement| Else\_Statement | end)

23-Else\_Statement: else Set Of Statements end

24-Repeat\_Statement: repeat Set Of Statements until

Condition\_Statement

25-Function\_Name: ([a-z]|[A-Z]) ([a-z]|[A-Z]|[0-9])\*

26-Parameter: Datatype Identifier

27-Function\_Declaration: Datatype Function\_Name

\( (Parameter(,Parameter)\*)? \)

28-Function\_Body: { Set Of Statements Return\_Statement }

29-Function\_Statement: Function\_Declaration Function\_Body

30-Main\_Function: Datatype main \(\) Function\_Body

31-Program: Function\_Statement\* Main\_Function

Set Of Statements: (Comment\_Statment |

Assignment\_Statement|Declaration\_Statement|

Write\_Statement| Read\_Statement|

Return\_Statement |

Function\_Call |

If\_Statement | Repeat\_Statement |

Function\_Statement)\*