

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)*