**Milestone 2**

6 - Id → Identifier Iden | Number Iden | ε

Iden → , Id | ε

Function\_Call → Identifier ( Id )

7 - Term → Number | Identifier Ter

Ter → ( Id ) | ε

8 - Arithmetic\_Operator → + | - | \* | /

9 - EQ → Arithmetic\_Operator Term E

E → EQ | Eq | ε

Eq → (Term EQ ) E | ε

Equation → Term E | E

10 - Expression → String | Term E | E

11 - Assignment\_Statement → Identifier := Expression

12 - Datatype → int | float | string

Ex → := Expression | ε

13 - I → Identifier Ex Ide

Ide → , I | ε

Assign → Assignment\_Statement Assignment | ε

Assignment → , Assign | ε

Declaration\_Statement → Datatype I ;

14 - Write\_Statement → write Write ;

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 - Cond → Boolean\_Operator Condition Cond | ε

Condition\_Statement → Condition Cond

21 - Statements → Assignment\_Statement | Declaration\_Statement | Write\_Statement | Read\_Statement | Condition\_Statement | If\_Statement | Repeat\_Statement | Function\_Call | Comment\_Statement

Set\_Of\_Statements → Statements State

State → Set\_Of\_Statements | ε

Else\_Statements → Else\_If\_Statement | Else\_Statement | end

If\_Statement → if Condition\_Statement then Set\_Of\_Statements Else\_Statements

22 - Else\_If\_Statement → elseif Condition\_Statement then Set\_Of\_Statements Else\_Statements

23 - Else\_Statement → else Set\_Of\_Statements end

24 - Repeat\_Statement → repeat Set\_Of\_Statements until Condition\_Statement

25 - FunctionName → Identifier

26 - Parameter → Datatype Identifier

27 - Para → Parameter Par | ε

Par → , Para | ε

Function\_Declaration → Datatype FunctionName ( Para )

28 - Function\_Body → { Set\_Of\_Statements Return\_Statement }

29 - Function\_Statement → Function\_Declaration Function\_Body

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

31 - Prog → Function\_Statement Prog | ε

Program → Prog Main\_Function