1. Function Call:

*FunCall* 🡪 **Identifier**(*FunPara*)

*FunPara* 🡪 € | **Identifier** *AnotherPara* | **Number** *AnotherPara*

*AnotherPara* 🡪 € | **,** **Identifier** *AnotherPara*

| **, Number** *AnotherPara*

“Left Factoring”

*AnotherPara* 🡪 € | , *IdentifiarORNumber* *AnotherPara*

*IdentifiarORNumber* 🡪 **Identifier** | **Number**

2- Term:

*Term* 🡪 **Number** |**Identifier**| *FunCall* “Left Factoring”

*Term* 🡪 **Number** | **Identifier** | **Identifier** (*FunPara*)

*Term* 🡪 **Number** | **Identifier** *Term’*

*Term’* 🡪 (*FunPara*) | €

1. Arithmetic Operator:

*OP*→ **+**|**-**|**\***|**/**

1. Equation:

*Bigequ* 🡪 (*Bigequ*) *OPequ* | *Equ* *OPequ*

*OPequ* 🡪 *Op* *Bigequ* | €

*Equ* 🡪 *Term* | €

1. Expression

*Exp*🡪**String** |*Term*| *Bigequ* “left factoring”

*Exp*🡪**String** |*Term* *Exp’* | (*Bigequ*) *OPequ* | *OPequ*

*Exp’* 🡪 *OPequ* | €

6- Assignment Statement

*Assign*🡪 **Identifier :=** *Expression*

7-Datatype

*Datatype*🡪**int** |**float** | **string**

8- Declaration Statement

*Declstmnt* 🡪 *Datatype* *IdenorAssign* *Mult* **;**

*IdenorAssign*🡪 **Identifier**| **Identifier :=** *Expression* (left factoring)

*Mult*🡪,*IdenorAssignMult*|€

*Declstmnt* 🡪 *Datatype* *IdenorAssign* *Mult* **;**

*IdenorAssign* 🡪 **Identifier** *IdenorAssign’*

*IdenorAssign’* 🡪 **:=** *Expression* | **€**

*Mult*🡪**,***IdenorAssignMult*|€

9- Write Statement

*Write*🡪**write** *WriteBody* **;**

*WriteBody* 🡪 *Exp* | **endl**

10- Read Statement

Read🡪**read** **Identifier** **;**

11- Return Statement

Ret🡪**return** *Exp***;**

12-Condition\_Operator

*CondOp*🡪**<**|**>**|**=**|**<>**

13-Condition

*Cond*🡪**Identifier** *Condition\_Operator Term*

14- Boolean Operator:

*BoolOp* 🡪 **&&** | **||** .

15 - Condition Statement:

*Cond\_Stmnt*🡪 *Cond* *MultipleConditions*

*MultipleConditions* 🡪 *BoolOp* *CondZ* | **€** .

16- *Statement*🡪 *Assign* | *Declstmnt* |*Write* | *Read* | *IFstmnt* |*Repeat*

17- Set Statement:

*SetStmnt* 🡪 *SetStmnt* *Statement* | **€**   (Left Recursion)

*SetStmnt*🡪*SetStmnt’*

*SetStmnt’*🡪*Statement* *SetStmnt’*|**€**

18- End:

*End* 🡪 *Else\_Statement*| *Else\_if\_Statement* | **end**

19 - IF Statement :

*IFstmnt* 🡪  **if** *Cond\_Stmnt* **then** *SetStmnt* *End*

20- Else IF Statement

*Elsif* 🡪 **elseif** *Cond\_Stmnt* **then** *SetStmnt* *End*

21- Else Statement

*Els* 🡪 **else** *SetStmnt* **end**

22- Repeat Statement:

*Repeat* 🡪 **repeat** *Stmntplus* **until** *Cond\_Stmnt*

*Stmntplus* 🡪  *Statement* *Stmntplus* | *Statement*  (Left factoring)

*Repeat* 🡪 **repeat** *Stmntplus* **until** *Cond\_Stmnt*

*Stmntplus* 🡪 *Statement* *Stmntplus’*

*Stmntplus’*🡪 *Stmntplus* | **€**

23- Function Name:

*FunName*🡪 **Identifier**

24- Parameters:

*Param*🡪 *Datatype* **Identifier**

25- Function Declaration:

*FunDecl*🡪 *Datatype* *FunName***(***Params***)**

*Params*🡪 *Param* *Morethanone* |€

*Morethanone*🡪 **,***Param* *Morethanone* | €

26- Function Body:

*FunBdy*🡪**{** *SetStmnt* *Ret* **}**

27- Function Statement:

*FunStmnt*🡪 *FunDecl* *FunBdy*

28- Main Function

*Main*🡪*Datatype* **main ()** *FunBdy*.

29- Program

*Program*🡪 *MoreFunsta* *Main*

*MoreFunsta*🡪 *FunStmnt* *MoreFunsta*| €