1. true/Expression 🡪 String | Term | Equation
2. true/Assignment\_Statment 🡪 identifier := Expression
3. true/Datatype 🡪 int | float | string
4. true/Declaration\_Statement 🡪 Datatype IdsList;

IdsList → AssignmentState Ids | identifier Ids

* + - Ids 🡪 ,IdL (identifier | AssignmentState) | ε
    - IdL 🡪 identifier | AssignmentState

1. true/Parameter 🡪 Datatype identifier.
2. Write\_Statement 🡪 write w\_state;

w­\_state 🡪 Expression | endl

1. Read\_Statement 🡪 read identifier;
2. true/Return\_Statement 🡪 return Expression;
3. Condition 🡪 identifier Condition\_Operator Term
4. ConditionOperator 🡪 < | > | = | <>
5. Function\_Call 🡪 identifier ( Args)

Args 🡪 Args , identifier | identifier | ε

• Args 🡪 Expression identifier Ident | ε

• Ident 🡪 ,identifier Ident | ε

1. true/Term 🡪 Number | Identifier | Function\_Call
2. Arthematic\_Operator 🡪 + | - | \* | /
3. AddOp -> +|-
4. MultOP -> /|\*
5. true/Equation 🡪 Terms | (Equation) SubEquation

• Terms 🡪 Term SubEquation

• SubEquation 🡪 Arthematic\_Operator Terms SubEquation | ε

1. Condition\_Statement 🡪 Condition b\_state

b\_state 🡪 b\_state Boolean\_Operator Condition | Boolean\_Operator Condition | ε

• b\_state 🡪 Boolean\_Operator Condition b\_state | ε

• Bool 🡪 Boolean\_Operator Condition Bool | ε

1. Boolean\_Operator 🡪 && | ||
2. If\_Statement 🡪 if Condition\_Statement then State next\_state

next\_state 🡪 Else\_If\_Statement | Else\_Statement | end

t/Statements 🡪 Statement Statements | ε

* true/Statements 🡪 statement state
* true/State 🡪 statements state |Return\_Statement| ε

true/statement 🡪 Write\_Statement | Read\_Statement | Return\_Statement | Assignment\_Statment| Declaration\_Statement | Function\_Statment| If\_Statement | Else\_If\_Statement | Else\_Statement | Repeat\_Statement

1. Else\_If\_Statement 🡪 elseif Condition\_Statement then State next\_state
2. Else\_Statement 🡪 else State end
3. Repeat\_Statement 🡪 repeat Statements until Condition\_Satetment
4. true/FunctionName 🡪 identifier
5. true/Function\_Declaration 🡪 Datatype FunctionName ( parameters )

true/ Parameters 🡪 Parameter Param | ε

true/Param 🡪 , Parameter Param | ε

1. true/Function\_Statment 🡪 Function\_Declaration Function\_Body
2. true/Function\_Body 🡪 { Statements Return\_Statement }
3. true/Main\_Function 🡪 Datatype main () Function\_Body
4. true/Program 🡪 FunctionStatements Main\_Function

true/FunctionStatements 🡪 Function\_Statement FunctionStatements | ε