**Function Call:**

FUNCTIONCALLASTERM 🡪 identifier (IDENTIFIERSLIST)

FUNCTIONCALL🡪 FUNCTIONCALLASTERM;

IDENTIFIERSLIST🡪 EXPRESSION PARAMETERS |

PARAMETERS🡪 ,EXPRESSION PARAMETERS |

**Term:**

Term🡪 number | identifier | FUNCTIONCALLASTERM

**Equation:**

EQUATION 🡪 MATHEXPRESSION EQUATION’

EQUATION’ 🡪 ADDOP MATHEXPRESSION |

MATHEXPRESSION 🡪 EQUATION MATHEXPRESSION’ | MATHTERM MATHEXPRESSION’

MATHEXPRESSION’ 🡪 | MULTOP MATHEXPRESSION MATHEXPRESSION’

MATHTERM 🡪 TERM | (EQUATION)

ADDOP 🡪 +|-

MULTOP 🡪\*|/

**Assignment Statement:**

ASSIGNMENTSTATEMENT🡪 identifier := EXPRESSION;

**Expression:**

EXPRESSION🡪TERM | string | EQUATION

**Declaration Statement:**

DECLARATIONSTATMENT 🡪 DATATYPE IDENTIFIERSDECLARATIONLIST;

IDENTIFIERSDECLARATIONLIST🡪 identifier ASSIGNORNOT DECLARATIONPARAMETERS

ASSIGNORNOT 🡪 := EXPRESSION |

DECLARATIONPARAMETERS 🡪 ,identifier ASSIGNORNOT DECLARATIONPARAMETERS |

DATATYPE 🡪 int|float|string

**Write Statement:**

WRITESTATEMENT🡪 write WRITETERMINAL;

WRITETERMINAL 🡪 EXPRESSION | endl

**Read Statement:**

READSTATEMENT🡪read IDENTIFIER;

**Condition Statement:**

CONDITIONSTATEMENT🡪 CONDITION CONDITIONSTATEMENT’

CONDITIONSTATEMENT’🡪 BOOLOP CONDITION |

CONDITION🡪 TERM CONDITIONALOPERATOR TERM | (CONDITIONSTATEMENT) | CONDITIONSTATEMENT

CONDITIONALOPERATOR 🡪 > | < | <> | =

BOOLOP🡪 && | ||

**Return Statement:**

RETURNSTATEMENT🡪return EXPRESSION;

**Statments:**

STATEMENTS🡪WRITESTATEMENT STATEMENTS | READSTATEMENT STATEMENTS | ASSIGNMENTSTATEMENT STATEMENTS | DECLARATIONSTATEMENT STATEMENTS | RETURNSTATEMENT STATEMENTS | IFSTATEMENT STATEMENTS | REPEATSTATEMENT STATEMENTS | FUNCTIONCALL STATEMENTS|

**If Statement:**

IFSTATEMENT🡪 if CONDITIONSTATEMENT then STATEMENTS ELSEIFSTATEMENT

ELSEIFSTATEMENT🡪elseif CONDITIONSTATEMENT then STATEMENTS ELSEIFSTATEMENT | ELSESTATEMENT | end

ELSESTATEMENT🡪else STATEMENTS end

**Repeat Statement:**

REPEATSTATEMENT🡪repeat STATEMENTS until CONDITIONSTATEMENT

**Function Declaration:**

FUNCTIONDECLARATION🡪 DATAYPE identifier(ARGUMENTSLIST)

ARGUMENTSLIST🡪ARGUMENT ARGUMENTS|

ARGUMENTS🡪,ARGUMENT ARGUMENTS|

ARGUMENT🡪DATATYPE identifier

**Function Body:**

FUNCTIONBODY🡪{STATEMENTS RETURNSTATEMENTS}

**Function Statement:**

FUNCTIONSTATEMENT🡪FUNCTIONDECLARATION FUNCTIONBODY

**Main Function:**

MAINFUNCTION🡪DATATYPE main() FUNCTIONBODY

**Program:**

PROGRAM 🡪 FUNCTIONSTATEMENTS MAINFUNCTION

FUNCTIONSTATMENTS 🡪 FUNCTIONSTATEMNT FUNCTIONSTATEMENTS|

|  |
| --- |
| **Terminals** |
| **Identifiers** |
| **Number** |
| **+** |
| **-** |
| **\*** |
| **/** |
| **(** |
| **)** |
| **String** |
| **,** |
| **Write** |
| **Read** |
| **Endl** |
| **Repeat** |
| **Until** |
| **If** |
| **Elseif** |
| **Else** |
| **then** |
| **end** |
| **<** |
| **>** |
| **<>** |
| **=** |
| **:=** |
| **&&** |
| **||** |
| **Return** |
| **Main** |