## **Parsed Rules**

```
(1) program → prolog FUNC func_list_pre MAIN '(' ')' '{' EOL body '}' EOL func_list EOF
     prolog → PACKAGE MAIN EOL
(3) func_list_pre → ε
(4) func_list_pre → FUNC_ID '(' param_list ')' func_def_type EOL FUNC func_list_pre
(5) func_list → \varepsilon
(6) func_list → func_def func_list
(7) func_def → FUNC FUNC_ID '(' param_list ')' func_def_type EOL
(8) param_list \rightarrow \epsilon
(9) param_list → VAR_ID type next_param
(10) next_param \rightarrow \epsilon
(11) next_param → ',' VAR_ID type next_param
(12) func_def_type → '{' EOL body '}'
(13) func_def_type → '(' func_def_ret
(14) func_def_ret \rightarrow ') '{' EOL body '}'
(15) func_def_ret \rightarrow ret_list_def ')' '{' EOL body '}'
(16) ret_list_def → type next_ret_def
(17) next_ret_def \rightarrow \epsilon
(18) next_ret_def → ',' type next_ret_def
(19) body \rightarrow \varepsilon
(20) body → command EOL body
(21) command → VAR_ID var_
(22) command → func_call
(23) command → if
(24) command → cycle
(25) command → return
(26) var_ → var_def
(27) var_ → var_move
(28) var_def → ':=' EXPR
(29) var_move → next_id '=' expr_list
(30) next_id \rightarrow \epsilon
(31) next id → ',' VAR ID next id
(32) if → IF COND '{' EOL body '}' if_cont
(33) if_cont → E
(34) if_cont \rightarrow ELSE else_
(35) else \rightarrow '{' EOL body '}'
(36) else_{-} \rightarrow if
(37) cycle → FOR for_def ';' COND ';' for_move '{' EOL body '}'
(38) for_def → ε
(39) for_def → VAR_ID var_def
(40) for_move \rightarrow \epsilon
(41) for_move → VAR_ID var_move
(42) return → RETURN return_list
(43) return_list → ε
(44) return_list → EXPR next_ret
(45) next_ret \rightarrow \epsilon
(46) next_ret → ',' EXPR next_ret
(47) func_call → FUNC_ID '(' func_args ')'
(48) func_args → ε
(49) func_args → EXPR next_arg
(50) next_arg → \varepsilon
(51) next_arg → ',' EXPR next_arg
(52) expr_list → EXPR next_expr
(53) expr_list → func_call
(54) next_expr → ε
(55) next_expr \rightarrow ',' EXPR next_expr
(56) type → INT
(57) type \rightarrow FLOAT64
(58) type → STRING
```