

BNF(V3)

- Start \rightarrow [fun_c]" \n" S
- <fun_c> \rightarrow '[' " \n" <fun_name>' (<arg_list>)' " \n" <stmt_queue>[R_N' (<stmt>)]' " \n" "EXIT_fun_c" ~ ']' ~
- S \rightarrow ~ \$ \n <stmt_queue> \$ ~
- <stmt_queue> \rightarrow <stmt> ~ " \n" <stmt_queue>
| <stmt> ~ " \n"
- <stmt> \rightarrow <mexp> | <lexp> | <if_st> | <loop_st> | <loop_c_st> |
<dec> | <fun_call>
- <fun_call> \rightarrow " [" <fun_name> " (" <arg_list> ") " "]"
- <fun_name> \rightarrow {<key>} * // any combination of key
- <arg_list> \rightarrow <id> <arg_list> | <id>
- <dec> \rightarrow <id> = <int> | <id> = <float> | <id> = <string>
- <mexp> \rightarrow <id> = <term0>
- <term0> \rightarrow <term0> + <term1> |
<term0> - <term1> | <term1>
- <term1> \rightarrow <term1> * <term2> | <term1> / <term2> |
<term2>
- <term2> \rightarrow <term3> ^ <term2> | <term3>
- <term3> \rightarrow <fac> | (<mexp>)
- <lexp> \rightarrow <lexp> OR <logic_exp1> | <logic_exp1>
- <logic_exp1> \rightarrow <logic_exp1> AND <logic_exp2> |

<logic_exp2>

- <logic_exp2> → NOT<exp> | <exp>
- <exp> → <fac><lopt><fac> | TRUE | FALSE
- <if_st> → "[\n"IF(<lexp>)"\n"<stmt_queue>
[\nREST_ALL"\n"<stmt_queue>] "]"
- <loop_st> → "[\n"CURL(S@<int>:E@<int>:G@<int>)"\n"
<stmt_queue>"]"
- <loop_c_st> → "[\n"CURL_C(S@<lexp>:E@<lexp>)"\n"<stmt_q
ueue>"]"
- <lopt> = "==" | "<=" | ">=" | "<" | ">"
- <fac> → <id> | <const>
- <const> → <int> | <string> | <float>
- <float> → <int>.<int>
- <string> → '<key>' | "<key>"
- <id> → <alpha> | <alpha><id> | <id><int>
- <alpha> → a | b | c | ... | x | y | z | A | B | C | ... | X | Y | X | " | _
- <digit> → 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9
- <key> → ascii code(32,33,34.....127)