%{

#include <stdio.h>

%}

%token tSRING tNUM tPRINT tGET tSET tFUNCTION tRETURN tIDENT tEQUALITY tIF tGT tLT tGEQ tLEQ tINC tDEC

%%

<prog>:'[' [<stmt> {<stmt>}] ']'

;

<stmt>:<set>

|<if>

|<print>

|<inc>

|<dec>

;

<set>:'[' tSET ',' tSTRING ',' <expr> ']'

;

<if>:'[' tIF ',' <cond> ',' '[' {<stmt>} ']' ['[' {<stmt>} ']']']'

;

<print>:'[' tPRINT ',' '[' <expr> ']' ']'

;

<inc>:'[' tINC ',' tSTRING ']'

;

<dec>:'[' tDEC ',' tSTRING ']'

;

<cond>:'[' <comp\_op> ',' <expr> ',' <expr> ']'

;

<comp\_op>: tGT

| tLT

| tGEQ

| tLEQ

| tEQUALITY

;

<expr>:tNUM

|tSTRING

|<get>

|<func>

|<opr>

|<cond>

;

<get>:'[' tGET ',' tSTRING ']'

|'[' tGET ',' tSTRING ',' '[' [<expr> {',' <expr>}] ']' ']'

;

<func>:'[' tFUNCTION ',' '['[tIDENT {',' tIDENT}]']' '['{<stmt>}']' ']'

;

<opr>:'[' <arithmetic\_op> ',' <expr> ',' <expr> ']'

;

<aritmetic\_op>: '+'

| '-'

| '\*'

| '/'

;

<return>:'[' tRETURN [',' <expr>] ']'

;

%%

int main ()

{

if (yyparse())

{

// parse error

printf("ERROR\n");

return 1;

}

else

{

// successful parsing

printf("OK\n");

return 0;

}

}