

FLCD Lab 8,9

github: <https://github.com/CronosClaus/flcd2/tree/main/flcd/lab8>

```
%{
#include <stdio.h>
#include <string.h>
int lines = 0;
%}

%option noyywrap
%option caseless

DIGIT      [0-9]
WORD       \"[a-zA-Z0-9]*\"
NUMBER     [+]?[1-9][0-9]*|0$
CHARACTER  \"[a-zA-Z0-9]\"
const      {WORD}{NUMBER}{CHARACTER}
id         [a-zA-Z][a-zA-Z0-9]*

%%

"start" {printf("Reserved word: %s\\n", yytext);}
"finish" {printf("Reserved word: %s\\n", yytext);}
"def" {printf("Reserved word: %s\\n", yytext);}
"else" {printf("Reserved word: %s\\n", yytext);}
"execute" {printf("Reserved word: %s\\n", yytext);}
"while" {printf("Reserved word: %s\\n", yytext);}
"if" {printf("Reserved word: %s\\n", yytext);}
"then" {printf("Reserved word: %s\\n", yytext);}
"int" {printf("Reserved word: %s\\n", yytext);}
"char" {printf("Reserved word: %s\\n", yytext); }
"read" {printf("Reserved word: %s\\n", yytext); }
"log" {printf("Reserved word: %s\\n", yytext); }
"string" {printf("Reserved word: %s\\n", yytext); }
"exit" {printf("Reserved word: %s\\n", yytext); }

{id} {printf("Identifier: %s\\n", yytext); }

{const} {printf("Constant: %s\\n", yytext); }

":" {printf("Separator: %s\\n", yytext); }
";" {printf("Separator: %s\\n", yytext); }
"{" {printf("Separator: %s\\n", yytext); }
"}" {printf("Separator: %s\\n", yytext); }
"(" {printf("Separator: %s\\n", yytext); }
")" {printf("Separator: %s\\n", yytext); }
"[" {printf("Separator: %s\\n", yytext); }
"]" {printf("Separator: %s\\n", yytext); }
```

```
"+" {printf( "Operator: %s\n", yytext ); }
"-" {printf( "Operator: %s\n", yytext ); }
"*" {printf( "Operator: %s\n", yytext ); }
"/" {printf( "Operator: %s\n", yytext ); }
"<" {printf( "Operator: %s\n", yytext ); }
">" {printf( "Operator: %s\n", yytext ); }
"<=" {printf( "Operator: %s\n", yytext ); }
">=" {printf( "Operator: %s\n", yytext ); }
"!=" {printf( "Operator: %s\n", yytext ); }
"==" {printf( "Operator: %s\n", yytext ); }
"=" {printf( "Separator: %s\n", yytext ); }
```

```
[ \t]+ {}
[\n]+ {lines++;}
```

```
. printf("Error on line %d\n", lines + 1);
%%
```