/\* LEX Program to implement a lexical analyzer for C without Symbol Table \*/

%{

#include <stdio.h>

%}

%%

"int"|"float"|"char"|"printf" { printf("Keyword: %s\n", yytext); }

[a-zA-Z\_][a-zA-Z0-9\_]\* { printf("Identifier: %s\n", yytext); }

[0-9]+ { printf("Number: %s\n", yytext); }

"=" { printf("Assignment Operator: %s\n", yytext); }

"-" { printf("Subtraction Operator: %s\n", yytext); }

"+" { printf("Addition Operator: %s\n", yytext); }

"\*" { printf("Multiplication Operator: %s\n", yytext); }

"/" { printf("Division Operator: %s\n", yytext); }

"(" { printf("Left Parenthesis: %s\n", yytext); }

")" { printf("Right Parenthesis: %s\n", yytext); }

"{" { printf("Left Brace: %s\n", yytext); }

"}" { printf("Right Brace: %s\n", yytext); }

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

"\".\*\"" { printf("String Literal: %s\n", yytext); }

[

]+ { /\* Ignore whitespace \*/ }

. { printf("Unknown: %s\n", yytext); }

%%

int main() {

printf("Enter C program code:\n");

yylex();

return 0;

}