Design the lex analyser for the given source statement.

%{

#include <stdio.h>

%}

%%

if printf("%s\t→ KEYWORD\n", yytext)

[a-zA-Z\_][a-zA-Z0-9\_]\* printf("%s\t→ IDENTIFIER\n", yytext)

"==" printf("%s\t→ EQ\_OP\n", yytext)

"!=" printf("%s\t→ NE\_OP\n", yytext)

"<" printf("%s\t→ LT\_OP\n", yytext)

">" printf("%s\t→ GT\_OP\n", yytext)

"=" printf("%s\t→ ASSIGN\_OP\n", yytext)

"(" printf("%s\t→ LEFT\_PAREN\n", yytext)

")" printf("%s\t→ RIGHT\_PAREN\n", yytext)

";" printf("%s\t→ SEMI\_COLON\n", yytext)

[0-9]+ printf("%s\t→ NUMBER\n", yytext)

[ \t\n]+ /\* skip whitespace \*/

. printf("%s\t→ UNKNOWN\n", yytext)

%%

int yywrap() return 1

int main()

printf("Enter source code (Ctrl+D or Ctrl+Z to finish):\n")

yylex()

return 0