EXP NO: 3   **DATE:28/2/25**

DEVELOP A LEXICAL ANALYSER TO RECOGNIZE A FEW PATTERNS IN C.

(EX.IDENTIFIERS, CONSTANTS, COMMENTS, AND OPERATORS, ETC.) USING

LEX TOOL.

```
%{
#include<stdio.h>
#include<string.h>
%}

%%
"int"|"float"|"if"|"else" {printf("Keyword: %s\n",yytext);}
[a-zA-Z_][a-zA-z0-9_]* {printf("Identifier: %s\n",yytext);}
[0-9]+\.[0-9]+  {printf("Floating Number: %s\n",yytext);}
[0-9]+ {printf("Integer Number: %s\n",yytext);}
"=="|"<="|">="|">"|"<"|"!="|"+"|"-"|"/"|"//"|"*" {printf("Operators: %s\n",yytext);}
[(){}|;.,]  {printf("Special Symbols:%s\n",yytext);}
"//".*  {printf("single line Comments:%s\n",yytext);}
"/*".*"*/"  {printf("multi line Comments: %s\n",yytext);}
%%

int yywrap(void){}

int main(){
yylex();
return 0;
}
```

```
[cdlab68@localhost 220701068]$ vi tokens.l
[cdlab68@localhost 220701068]$ lex tokens.l
[cdlab68@localhost 220701068]$ gcc lex.yy.c
[cdlab68@localhost 220701068]$ ./a.out
hi
Identifier: hi

23
Integer Number: 23

|
Special Symbols:|

float
Keyword: float
```