31&34:TOKENS LEX PROGRAM:

```
digit [0-9]
letter [A-Za-z]
%{
int count_id,count_key;
%}
%%
(stdio.h|conio.h) { printf("%s is a standard library\n",yytext); }
(include|void|main|printf|int) { printf("%s is a keyword\n",yytext); count_key++; }
{letter}({letter}|{digit})* { printf("%s is a identifier\n", yytext); count id++; }
{digit}+ { printf("%s is a number\n", yytext); }
\"(\\.|[^"\\])*\" { printf("%s is a string literal\n", yytext); }
.|\n { }
%%
int yywrap(void) {
return 1;
}
int main(int argc, char *argv[]) {
yyin = fopen(argv[1], "r");
yylex();
printf("number of identifiers = %d\n", count id);
printf("number of keywords = %d\n", count key);
fclose(yyin);
}
```

OUTPUT:

```
C:\CD-Lex Experiments-2>a.exe sample.c
include is a keyword
sain is a sterlard library
void is a keyword
int is a keyword
int is a identifier
is a identifier
is a identifier
is a keyword
int is a identifier
is a identifier
is a identifier
is a string literal
number of identifiers = 3
number of identifiers = 5
C:\CD-Lex Experiments-2>
C:\CD-Lex Experiments-2>
C:\CD-Lex Experiments-2>
C:\CD-Lex Experiments-2>
```