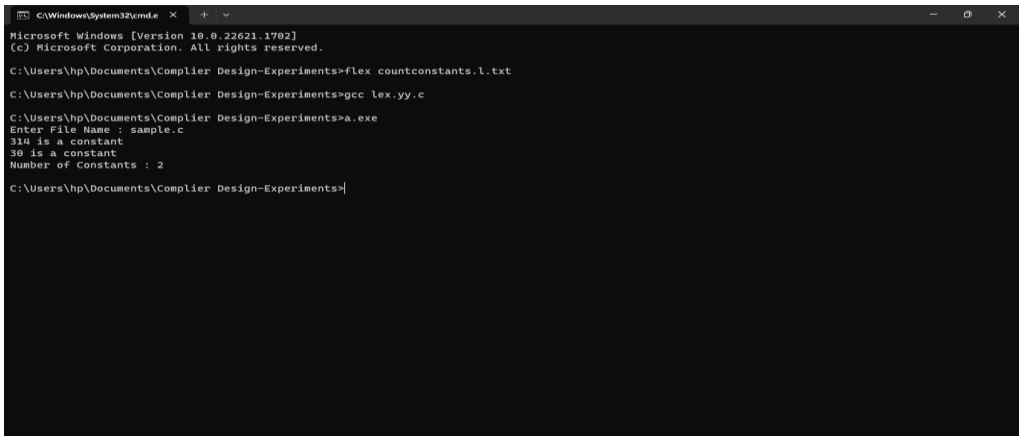
22:COUNT CONSTANTS LEX PROGRAM:

```
%{
int nmacro, nheader;
%}
%%
^#define { nmacro++; }
^#include { nheader++; }
.|\n {  }
%%
int yywrap(void) {
return 1;
}
int main(int argc, char *argv[]) {
yyin = fopen(argv[1], "r");
yylex();
printf("Number of macros defined = %d\n", nmacro);
printf("Number of header files included = %d\n", nheader);
fclose(yyin);
}digit [0-9]
%{
int cons=0;
%}
%%
{digit}+ { cons++; printf("%s is a constant\n", yytext);  }
.|\n { }
%%
int yywrap(void) {
return 1; }
int main(void)
{
FILE *f;
char file[10];
printf("Enter File Name : ");
scanf("%s",file);
f = fopen(file,"r");
yyin = f;
yylex();
printf("Number of Constants : %d\n", cons);
fclose(yyin);
```

}

OUTPUT:


C:\Windows\System32\cmd.e
Microsoft Windows [Version 10.0.22621.1702]
(c) Microsoft Corporation. All rights reserved.
C:\Users\hp\Documents\Complier Design-Experiments>flex countconstants.l.txt
C:\Users\hp\Documents\Complier Design-Experiments>gcc lex.yy.c
C:\Users\hp\Documents\Complier Design-Experiments>a.exe
Enter File Name : sample.c
314 is a constant
30 is a constant
Number of Constants : 2
C:\Users\hp\Documents\Complier Design-Experiments>