Exp. No. 18

Write a LEX program to count the number of Macros defined and header files included in the C program.

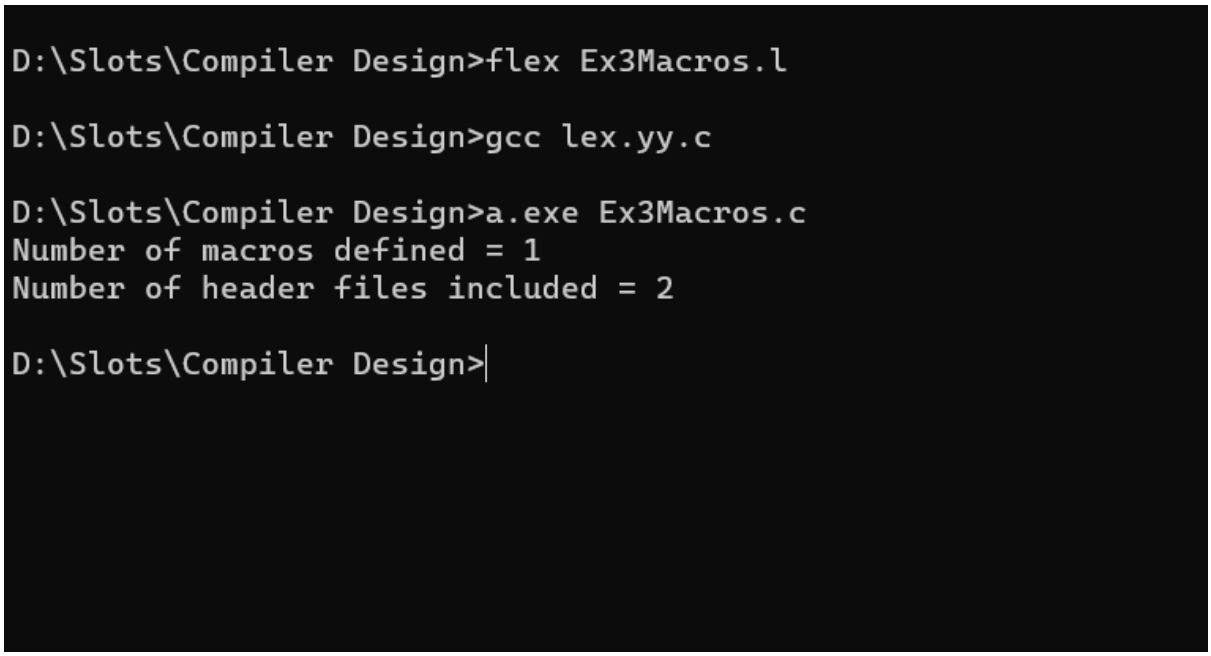
Program: (count_macro.l)

```
%{
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);
}
```

Input Source Program: (sample.c)

```
#define PI 3.14
#include<stdio.h>
#include<conio.h>
void main()
{
int a,b,c = 30;
printf("hello");
}
```

OUTPUT:


D:\Slots\Compiler Design>flex Ex3Macros.l
D:\Slots\Compiler Design>gcc lex.yy.c
D:\Slots\Compiler Design>a.exe Ex3Macros.c
Number of macros defined = 1
Number of header files included = 2
D:\Slots\Compiler Design>