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

Input Source Program: (sample.c)

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

```
%{

#include <stdio.h>

int macroCount = 0;

int headerCount = 0;

%}


%%

#define    { macroCount++; }

#include   { headerCount++; }

\n       ; // Ignore newlines

.        ; // Ignore other characters

%%


int main() {
```

```c
    printf("Enter your C program (Ctrl+D to end):\n");


    yylex();


    printf("\nNumber of Macros defined: %d\n", macroCount);

    printf("Number of Header files included: %d\n", headerCount);


    return 0;

}

int yywrap() {

    return 1; // indicate that there is no more input

}
```
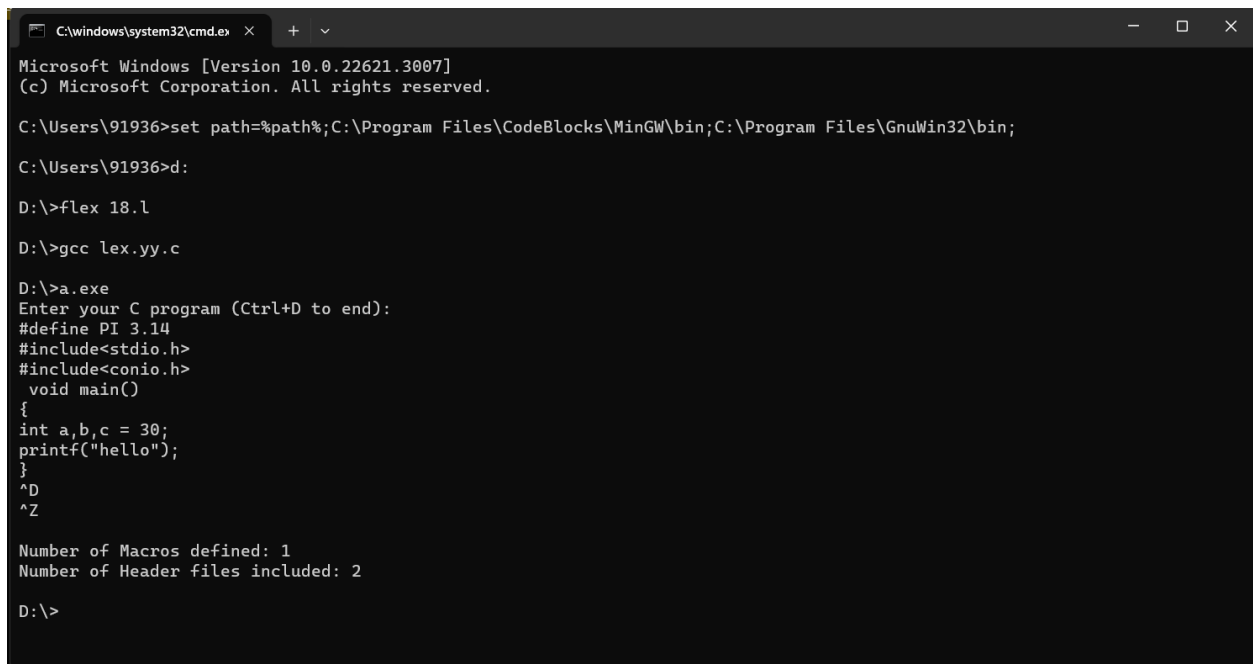
```
C:\windows\system32\cmd.ex  ×    +  ∨                                                                              —  ▢  ☓

Microsoft Windows [Version 10.0.22621.3007]
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C:\Users\91936>set path=%path%;C:\Program Files\CodeBlocks\MinGW\bin;C:\Program Files\GnuWin32\bin;

C:\Users\91936>d:

D:\>flex 18.l

D:\>gcc lex.yy.c

D:\>a.exe
Enter your C program (Ctrl+D to end):
#define PI 3.14
#include<stdio.h>
#include<conio.h>
 void main()
{
int a,b,c = 30;
printf("hello");
}
^D
^Z

Number of Macros defined: 1
Number of Header files included: 2

D:\>
```