22.Write a LEX program to count the number of comment lines in a given C program and eliminate them and write into another file.

Input Source File: (input.c)

```
#include<stdio.h>
int main()
{
int a,b,c; /*varible declaration*/
printf("enter two numbers");
scanf("%d %d",&a,&b);
c=a+b;//adding two numbers
printf("sum is %d",c);
return 0;
}
```

```
%{
#include <stdio.h>
int commentLines = 0;
%}


%x COMMENT


%%


"/*"    { BEGIN(COMMENT); }

<COMMENT>"*/"   { BEGIN(INITIAL); }

<COMMENT>.    { /* Ignore characters within comments */ }
```

```
"//"   { commentLines++; while (input() != '\n'); }

\n     { fprintf(yyout, "%s", yytext); }


.      { fprintf(yyout, "%s", yytext); }


%%


int yywrap() { return 1; } // indicate no more input


int main() {

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


    yylex();


    FILE *outputFile = fopen("comments_eliminated.txt", "w");

    if (!outputFile) {

        perror("Error opening output file");

        return 1;

    }


    fprintf(outputFile, "\nNumber of Comment Lines: %d\n", commentLines);
```
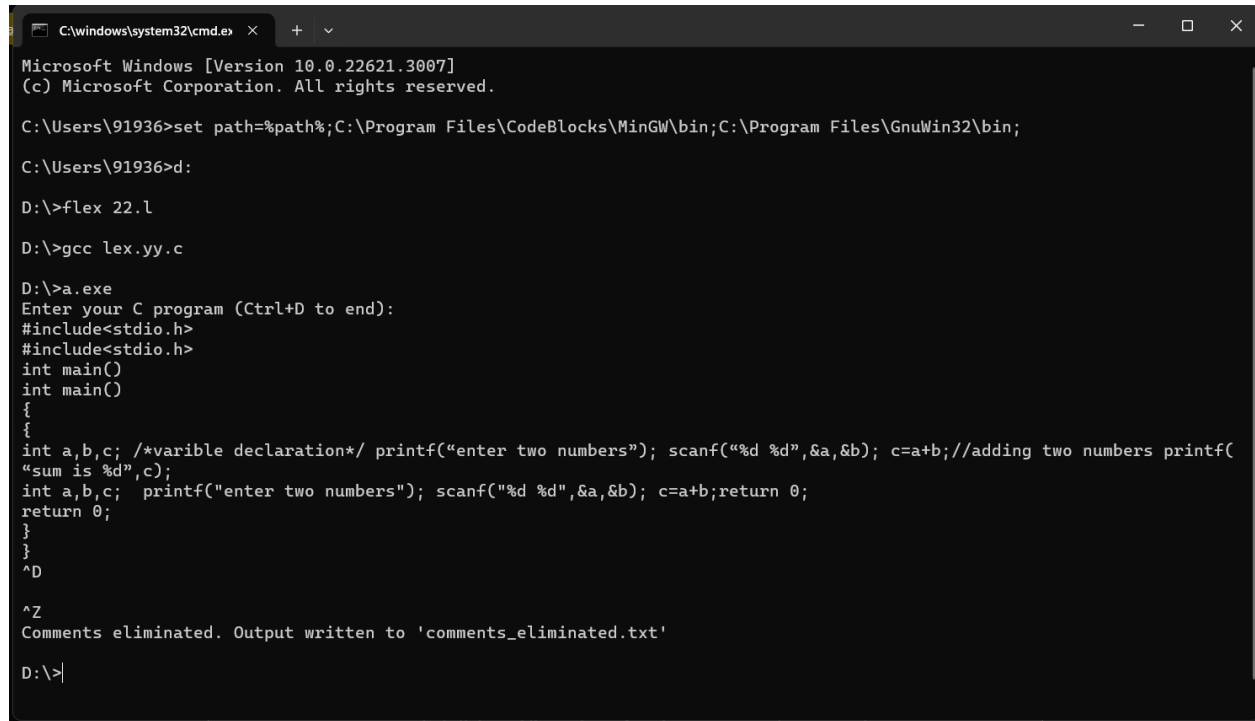
fclose(outputFile);

printf("Comments eliminated. Output written to 'comments_eliminated.txt'\n");

return 0;

}

```
C:\windows\system32\cmd.exe          —  □  ×
Microsoft Windows [Version 10.0.22621.3007]
(c) Microsoft Corporation. All rights reserved.

C:\Users\91936>set path=%path%;C:\Program Files\CodeBlocks\MinGW\bin;C:\Program Files\GnuWin32\bin;

C:\Users\91936>d:

D:\>flex 22.l

D:\>gcc lex.yy.c

D:\>a.exe
Enter your C program (Ctrl+D to end):
#include<stdio.h>
#include<stdio.h>
int main()
int main()
{
{
int a,b,c; /*varible declaration*/ printf("enter two numbers"); scanf("%d %d",&a,&b); c=a+b;//adding two numbers printf(
"sum is %d",c);
int a,b,c;  printf("enter two numbers"); scanf("%d %d",&a,&b); c=a+b;return 0;
return 0;
}
}
^D

^Z
Comments eliminated. Output written to 'comments_eliminated.txt'

D:\>
```