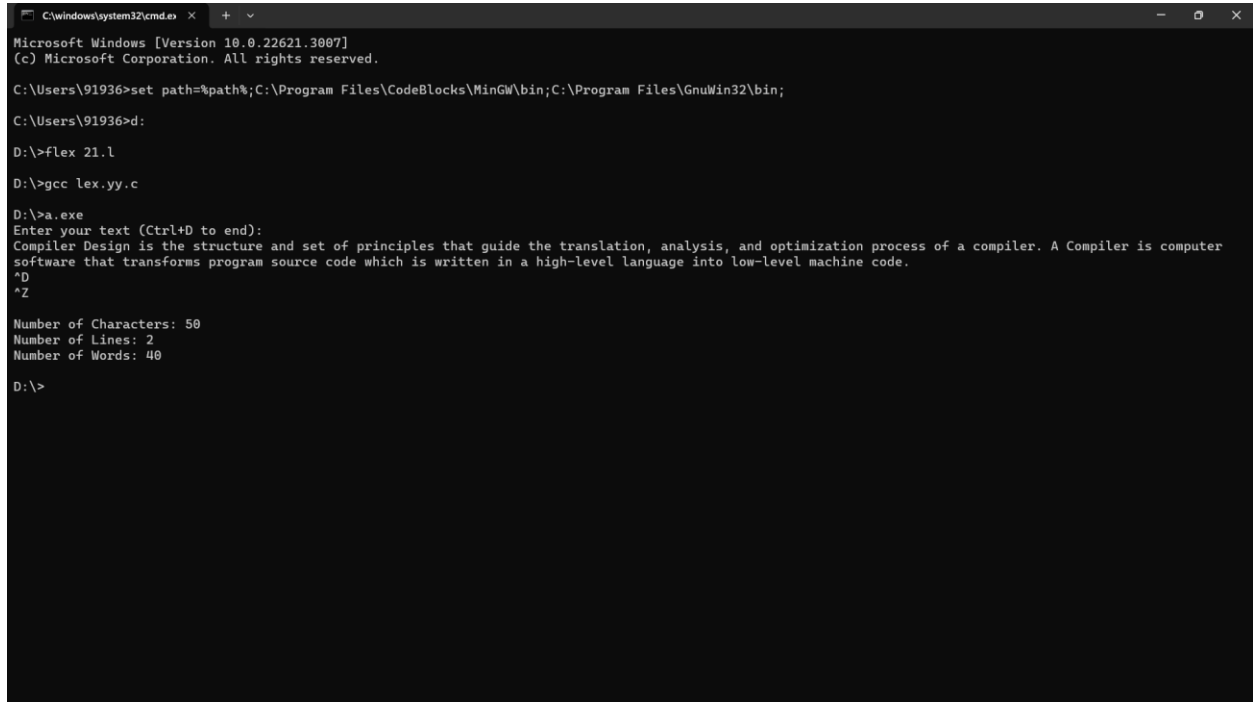


21. Write a LEX specification count the number of characters, number of lines & number of words.

```
% {  
#include <stdio.h>  
int charCount = 0;  
int lineCount = 0;  
int wordCount = 0;  
% }  
  
%%  
  
.      { charCount++; }  
\n     { lineCount++; }  
[a-zA-Z]+ { wordCount++; }  
  
%%  
  
int main() {  
    printf("Enter your text (Ctrl+D to end):\n");  
  
    yylex();  
  
    printf("\nNumber of Characters: %d\n", charCount);  
    printf("Number of Lines: %d\n", lineCount);  
    printf("Number of Words: %d\n", wordCount);  
  
    return 0;  
}
```

```
int yywrap() {  
    return 1;  
}
```



```
C:\windows\system32\cmd.exe x + v  
Microsoft Windows [Version 10.0.22621.3807]  
(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 21.1  
D:\>gcc lex.yy.c  
D:\>a.exe  
Enter your text (Ctrl+D to end):  
Compiler Design is the structure and set of principles that guide the translation, analysis, and optimization process of a compiler. A Compiler is computer  
software that transforms program source code which is written in a high-level language into low-level machine code.  
^D  
^Z  
  
Number of Characters: 50  
Number of Lines: 2  
Number of Words: 40  
  
D:\>
```