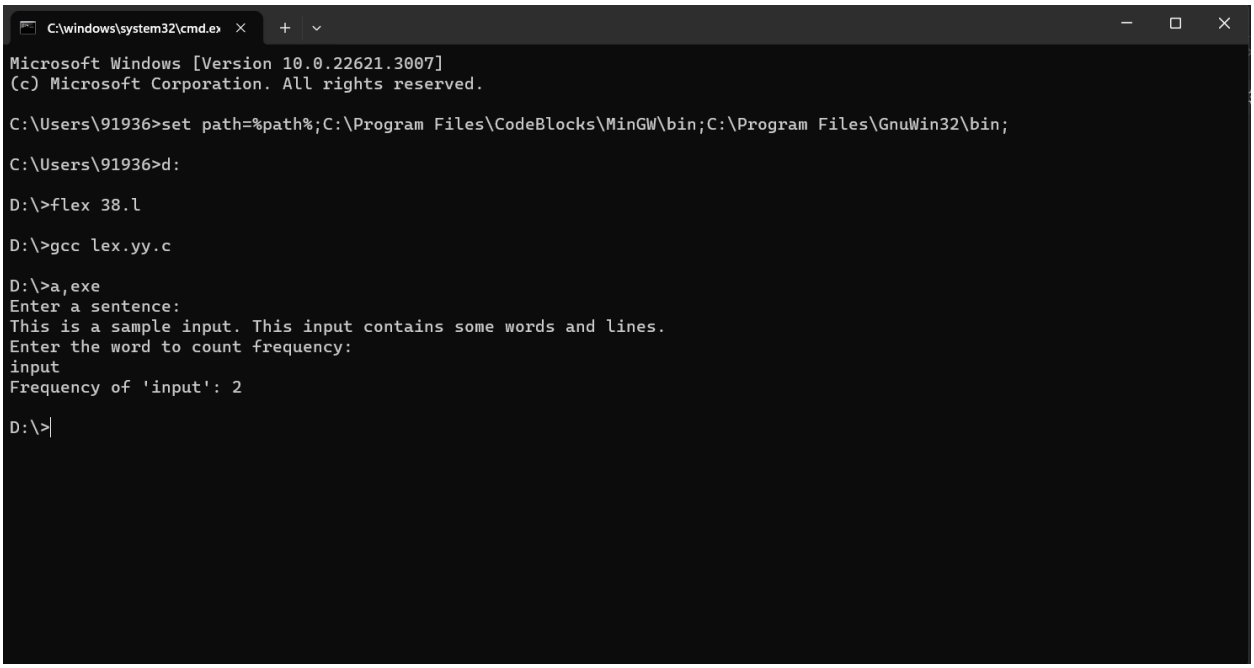
38. Write a LEX program to count the frequency of the given word in a given sentence.

```
%{
#include <stdio.h>
#include <string.h>
int word_count = 0;
char target_word[100]; // Maximum word length, adjust as needed
%}

%%
[a-zA-Z]+      {
                if (strcmp(yytext, target_word) == 0) {
                   word_count++;
                }
              }
.             ; /* Ignore any other characters */

%%

int main() {
   char input[4096]; // Adjust the size based on your needs
   printf("Enter a sentence:\n");

   if (fgets(input, sizeof(input), stdin) == NULL) {
      fprintf(stderr, "Error reading input.\n");
      return 1;
   }

   // Remove newline character if present
   for (int i = 0; input[i] != '\0'; i++) {
```

```
        if (input[i] == '\n') {
            input[i] = '\0';
            break;
        }
    }

    printf("Enter the word to count frequency:\n");
    scanf("%s", target_word);

    // Set the input buffer
    yy_scan_string(input);

    // Start parsing
    yylex();

    // Print the frequency of the target word
    printf("Frequency of '%s': %d\n", target_word, word_count);

    return 0;
}
int yywrap() { return 1; }
```


C:\windows\system32\cmd.ex
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 38.l
D:\>gcc lex.yy.c
D:\>a,exe
Enter a sentence:
This is a sample input. This input contains some words and lines.
Enter the word to count frequency:
input
Frequency of 'input': 2
D:\>