13. Write a C program for implementing a Lexical Analyzer to Count the number of characters, words, and lines .

PROGRAM:

```c
#include <stdio.h>
#include <ctype.h>
int main() {
    int ch, chars = 0, words = 0, lines = 0, inWord = 0;
    while ((ch = getchar()) != EOF) {
        chars++;
        if (ch == '\n') lines++;
        if (isspace(ch))
            inWord = 0;
        else if (!inWord) {
            inWord = 1;
            words++;
        }
    }
    printf("Characters = %d\nWords = %d\nLines = %d\n", chars, words, lines);
    return 0;
}
```

OUTPUT:

```
Output

Hello world
Welcome students
Characters = 29
Words = 4
Lines = 2
```