**Exp. No. 3**

**Design a lexical Analyzer to find the number of whitespaces and newline characters using C.**

**Program:**

**#include <stdio.h>**

**#include <string.h>**

**int main()**

**{**

**char str[100];**

**int i, whitespaces = 0, newlines = 0;**

**printf("Enter a string: ");**

**gets(str); // Reads the string**

**for (i = 0; i < strlen(str); i++)**

**{**

**if (str[i] == ' ')**

**whitespaces++;**

**if (str[i] == '\n')**

**newlines++;**

**}**

**printf("Number of whitespaces: %d\n", whitespaces);**

**printf("Number of newlines: %d\n", newlines);**

**return 0;**

**}**

Output:

