

## Experiment -2

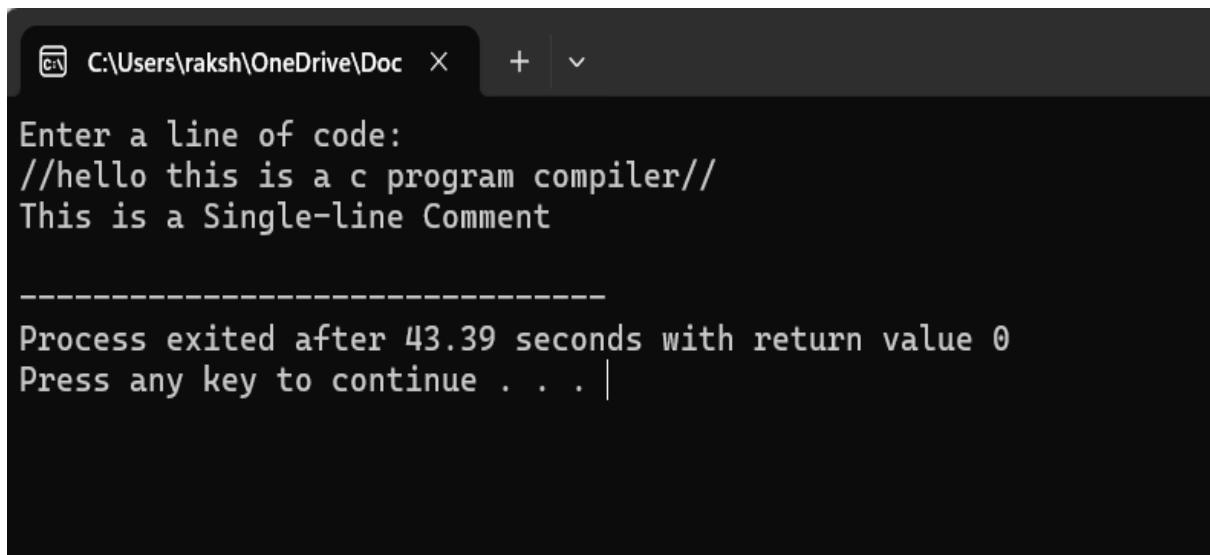
**Develop a lexical Analyzer to identify whether a given line is a comment or not using C program.**

Program:

```
#include <stdio.h>
#include <string.h>

int main() {
    char line[200];
    printf("Enter a line of code:\n");
    fgets(line, sizeof(line), stdin);
    int len = strlen(line);
    /* Remove newline character */
    if (line[len - 1] == '\n')
        line[len - 1] = '\0';
    /* Check for single-line comment */
    if (line[0] == '/' && line[1] == '/') {
        printf("This is a Single-line Comment\n");
    }
    /* Check for multi-line comment */
    else if (line[0] == '/' && line[1] == '*') {
        int L = strlen(line);
        if (line[L - 2] == '*' && line[L - 1] == '/')
            printf("This is a Multi-line Comment\n");
        else
            printf("Invalid Comment: Missing *\n");
    }
    else {
        printf("This is NOT a Comment\n");
    }
    return 0;
}
```

## Output:



The screenshot shows a terminal window with a dark background and light-colored text. At the top, the path 'C:\Users\raksh\OneDrive\Doc' is visible along with standard window controls. The main area contains the following text:

```
Enter a line of code:  
//hello this is a c program compiler//  
This is a Single-line Comment  
-----  
Process exited after 43.39 seconds with return value 0  
Press any key to continue . . . |
```