BHARGAVI.B
192311136
SERIAL.NUM:4
Exp. No. 2
Develop a lexical Analyzer to identify whether a given line is a comment or not using C
Program:

```c
#include <stdio.h>

int main()
{
    char com[100]; // Increased buffer size for safety
    int i = 2, a = 0;

    printf("\nEnter comment: ");
    fgets(com, sizeof(com), stdin); // Safe input function

    // Checking if the input starts with '/'
    if (com[0] == '/')
    {
        // Checking for single-line comment "//"
        if (com[1] == '/')
            printf("\nIt is a comment\n");

        // Checking for multi-line comment "/* */"
        else if (com[1] == '*')
        {
            for (i = 2; com[i] != '\0'; i++)
            {
                if (com[i] == '*' && com[i + 1] == '/')
                {
                    printf("\nIt is a comment\n");
                    a = 1;
                    break;
                }
            }
            if (a == 0)
                printf("\nIt is not a comment\n");
        }
```

```c
        else
            printf("\nIt is not a comment\n");
    }
    else
        printf("\nIt is not a comment\n");

    return 0;
}
```

```
Output

Enter comment: //hello

It is a comment


=== Code Execution Successful ===
```