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");
}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 ===
```