

Program:

```
CD > Pract6 > C prog.c > ...
1  #include <stdio.h>
2  #include <string.h>
3  void E();
4  void T();
5  void F();
6  void Tds();
7  void Eds();
8  char input[100];
9  int i, error = 0;
10
11 void main() {
12     printf("Please Enter the Input: \n");
13     scanf("%s", input);
14     E();
15     if (i == strlen(input) && error == 0) {
16         printf("\nString is Accepted");
17     } else {
18         printf("\nRejected");
19     }
20 }
```

```
21 void E() {
22     T();
23     Eds();
24 }
25 void T() {
26     F();
27     Tds();
28 }
29 void Eds() {
30     if (input[i] == '+') {
31         i++;
32         T();
33         Eds();
34     }
35 }
36 void Tds() {
37     if (input[i] == '*') {
38         i++;
39         F();
40         Tds();
```

```
41     }
42 }
43 void F() {
44     if (input[i] == 'a') {
45         i++;
46     } else if (input[i] == '(') {
47         i++;
48         E();
49         if (input[i] == ')') {
50             i++;
51         } else {
52             error = 1;
53         }
54     } else {
55         error = 1;
56     }
57 }
```

Output:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  JUPYTER

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS D:\5th-Sem-Practicals> cd .\CD\Pract6\
PS D:\5th-Sem-Practicals\CD\Pract6> gcc prog.c
PS D:\5th-Sem-Practicals\CD\Pract6> ./a.exe
Please Enter the Input:
a+a+a

String is Accepted
PS D:\5th-Sem-Practicals\CD\Pract6> █
```