#include<stdio.h>

#include<string.h>

void E();

void T();

void Tdash();

void Edash();

void F();

char input[20];

int i=0,error=0;

int main()

{

printf("\nEnter the string:");

scanf("%s",input);

E();

if(input[i]==0 && error==0)

{

printf("String is accepted\n");

}

else

{

printf("String is not accepted\n");

}

return 0;

}

void E()

{

T();

Edash();

}

void T()

{

F();

Tdash();

}

void Tdash()

{

if(input[i]=='\*')

{

i++;

F();

Tdash();

}

}

void Edash()

{

if(input[i]=='+')

{

i++;

T();

Edash();

}

}

void F()

{

if(input[i]=='(')

{

i++;

E();

if(input[i]==')')

{

i++;

}

}

else if((input[i]>='a' && input[i]<='z') || (input[i]>='A' && input[i]<='Z') || isalpha(input[i]))

{

i++;

}

else if(isdigit(input[i]))

{

i++;

}

else

{

error=1;

}

}

**Output:**

pccoe@212A-15:~$ gcc rdp.c

pccoe@212A-15:~$ ./a.out

Enter the string:a+b\*c

String is accepted

pccoe@212A-15:~$ gcc rdp.c

pccoe@212A-15:~$ ./a.out

Enter the string:5+7\*9

String is accepted

pccoe@212A-15:~$