#include<stdio.h>//standard I/O header file

#include<ctype.h>//standard library header file

char stack[100];//stack implementation

int top=-1; //declaring variables

void push(char x)//push function

{

stack[++top]=x;

}

char pop()//pop function

{

if(top==-1)

return -1;

else

return stack[top--];

}

int priority(char x)//priority function

{

if(x=='(') //condition check

return 0;

if(x=='+'||x=='-') //condition check

return 1;

if(x=='\*'||x=='/') //condition check

return 2;

return 0;

}

int main()

{

char exp[100];

char \*e,x;

printf("enter the expression\n");

scanf("%s",exp);

printf("\n");//printing statement

e=exp;

while(\*e!='\0') //condition check

{

if(isalnum(\*e)) //condition check

printf("%c",\*e);

else if(\*e=='(') //condition check

push(\*e);

else if(\*e==')') //condition check

{

while((x=pop())!='(') //condition check

printf("%c",x);

}

else

{

while(priority(stack[top])>=priority(\*e)) //condition check

printf("%c",pop());//printing statement

push(\*e);

}

e++;

}

while(top !=-1) //condition check

{

printf("%c",pop());

}

return 0;

}