//infix to postfix//

#include<stdio.h>//standard input output header file//

#include<ctype.h>

char stack[20];//declaring the stack size//

int top=-1;//declaring the initial value of top is -1//

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)//ptiority function//

{

if(x=='(')// if the value of x is ( then return to 0//

return 0;

if(x=='+'||x=='-')// if the value of x is + or - then return to 1//

return 1;

if(x=='\*'||x=='/')// if the value of x is \* or / then return to 2//

return 2;

}

int main()// main function//

{

char \*e,x;

char exp[20];

printf("enter the expression\n");//displaying the expression//

scanf("%s",exp);

e=exp;//initiliazing the value of e to the exp//

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

{

if(isalnum(\*e))

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

else if(\*e=='(')

push(\*e);//checks the condion of else if and pushes the element//

else if(\*e==')')

{

while((x=pop())!='(')

printf("%c",x);

}

else

{

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

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

push(\*e);

}

e++;//incrementation of e by 1//

}

while(top!=-1)//contion checks//

{

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

}

printf("\n");

return 0;//terminates the program//

}