import java.util.\*;

class stack

{

int size;

char arr[];

int top;

stack(int s)

{

size=s;

arr=new char[s];

top=-1;

}

boolean isfull()

{

return top==size-1;

}

boolean isempty()

{

return top==-1;

}

void push(char d)

{

if(isfull())

{

System.out.println("Stack is overflow");

}

else

{

top++;

arr[top]=d;

}

}

char pop()

{

if(isempty())

{

System.out.println("Stack is underflow");

return '#';

}

else

{

char p=arr[top];

top--;

return p;

}

}

char peek()

{

if(isempty())

{

System.out.println("Stack is underflow");

return '#';

}

else

{

char p=arr[top];

return p;

}

}

int precendence(char c)

{

if(c=='^')

return 3;

else if(c=='\*'||c=='/')

return 2;

else if(c=='+'||c=='-')

return 1;

else

return -1;

}

}

public class Main

{

public static void main(String args[])

{

Scanner s=new Scanner(System.in);

String str=new String();

str=s.next();

stack s1=new stack(str.length());

StringBuffer postfix=new StringBuffer();

for(int i=0;i<str.length();i++)

{ char c=str.charAt(i);

if(c>='A'&&c<='Z' || c<='z'&&c>='a' || c>='0'&&c<='9')

postfix.append(c);

else if(c=='(')

s1.push(c);

else if(c==')')

{

while(!s1.isempty()&&s1.peek()!='(')

{

postfix.append(s1.pop());

}

s1.pop();

}

else

{ while(!s1.isempty()&&s1.precendence(c)<=s1.precendence(s1.peek())&&c!='^')

postfix.append(s1.pop());

s1.push(c);

}

}

while(!s1.isempty())

postfix.append(s1.pop());

System.out.println(postfix);

}

}