import java.util.\*;

import java.util.stream.\*;

class Test

{

public static List<String> expand(String s)

{

Stack<Set<String>> p1=new Stack<Set<String>>();

Stack<Set<String>> p2=new Stack<Set<String>>();

Set<String> c=new HashSet<String>();

Set<String> p3=new HashSet<String>();

p3.add("");

for(char ch:s.toCharArray())

{

if(Character.toString(ch).equals("{"))

{

p2.add(p3);

p3=new HashSet<String>();

p3.add("");

p1.add(c);

c=new HashSet<String>();

}

else if(Character.toString(ch).equals("}"))

{

c.addAll(p3);

Set<String> pp=p2.pop();

Set<String> np=new HashSet<String>();

for(String pp1:pp)

{

for(String c1:c)

{

String nc=pp1+c1;

np.add(nc);

}

}

p3=np;

c=p1.pop();

}

else if(Character.toString(ch).equals(","))

{

c.addAll(p3);

p3=new HashSet<String>();

p3.add("");

}

else

{

Set<String> np=new HashSet<String>();

for(String pp2: p3 )

{

String np1=pp2+ch;

np.add(np1);

}

p3=np;

}

}

List<String> res=p3.stream().collect(Collectors.toList());

Collections.sort(res);

return res;

}

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

String s=sc.next();

Test t=new Test();

System.out.println(t.expand(s));

}

}