

“Oh God”, Lara Croft exclaims, “it’s one of these dumb riddles again!”

In Tomb Raider XIV, Lara is, as ever, gunning her way through ancient Egyptian pyramids, pre-historic caves and medieval hallways. Now she is standing in front of some important Germanic looking doorway and has to solve a linguistic riddle to pass. As usual, the riddle is not very intellectually challenging.

This time, the riddle involves poems containing a “Schuttelreim”. An example of a Schuttelreim is the following short poem:

```
Ein Kind halt seinen Schnabel nur,  
wenn es hangt an der Nabelschnur.
```

Note: German users, please, forgive me. I had to modify something as they were not appearing correctly in plain text format

A Schuttelreim seems to be a typical German invention. The funny thing about this strange type of poetry is that if somebody gives you the first line and the beginning of the second one, you can complete the poem yourself. Well, even a computer can do that, and your task is to write a program which completes them automatically. This will help Lara concentrate on the “action” part of Tomb Raider and not on the “intellectual” part.

Input

The input will begin with a line containing a single number n . After this line follow n pairs of lines containing Schuttelreims. The first line of each pair will be of the form

```
 $s_1 < s_2 > s_3 < s_4 > s_5$ 
```

where the s_i are possibly empty, strings of lowercase characters or blanks. The second line will be a string of lowercase characters or blanks ending with three dots ‘...’. Lines will be at most 100 characters long.

Output

For each pair of Schuttelreim lines l_1 and l_2 you are to output two lines c_1 and c_2 in the following way: c_1 is the same as l_1 only that the bracket marks ‘<’ and ‘>’ are removed. Line c_2 is the same as l_2 , except that instead of the three dots the string $s_4 s_3 s_2 s_5$ should appear.

Sample Input

```
3  
ein kind haelt seinen <schn>abel <n>ur  
wenn es haengt an der ...  
weil wir zu spaet zur <>oma <k>amen  
verpassten wir das ...  
<d>u <b>ist  
...
```

Sample Output

```
ein kind haelt seinen schnabel nur  
wenn es haengt an der nabel schnur  
weil wir zu spaet zur oma kamen  
verpassten wir das koma amen  
du bist  
bu dist
```