Baby Names
Filename: names

In Indian culture, names can often get very long because full names reveal ancestry on both sides of the family. In addition, unlike American culture, long names tend to be rather auspicious so when given the choice, couple tend to choose longer names over shorter names. To help Indian couples come up with potential names for children, write a program that takes in the name of the mother and father of a child and propose any of the longest common subsequences of their names as a name for the child.

The Problem
Given the names of the parents of a child, determine a longest common subsequence between the two names.

The Input
The first line of the input file will contain a number n $(1 \leq n \leq 100)$ indicating the number cases to process. The following n lines will contain two strings of lowercase letters, m and f, the mother's and father's names, respectively, separated by a space. Both names will be in between 1 and 100 characters, inclusive. It is guaranteed that all pairs of names will share at least one letter in common.

The Output
For couple output one possible name for their child. In order to be accepted, the name must be a longest common subsequence of both the mother's and father's names.

Sample Input
```
3
anna frank
anuradhasingh ariannasingh
melanie mark
```

Sample Output
```
an
araasingh
ma
```