A. Common Permutation

Time limit: 0.133s   Memory limit: 1536 MB

Given two strings of lowercase letters, *a* and *b*, print the longest string *x* of lowercase letters such that there is a permutation of *x* that is a subsequence of *a* and there is a permutation of *x* that is a subsequence of *b*.

Input
Input file contains several lines of input. Consecutive two lines make a set of input. That means in the input file line **1** and **2** is a set of input, line **3** and **4** is a set of input and so on. The first line of a pair contains *a* and the second contains *b*. Each string is on a separate line and consists of at most **1000** lowercase letters.

Output
For each set of input, output a line containing *x*. If several *x* satisfy the criteria above, choose the first one in alphabetical order.

Example

```
Sample input:
pretty
women
walking
down
the
street

Sample output:
e
nw
et
```

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