

Problem N: Subsequence and Permutation of String

Time limit: 2s; Memory limit: 512 MB

Given 2 strings *S* and *T*, find the lexicographically smallest string *X* satisfying following conditions:

- X is a subsequence of S.
- X is a permutation of T.

Input

- Each test contains 2 lines.
- The first line is string S ($1 \le |S| \le 10^5$).
- The second line is string T ($1 \le |T| \le 10^3$).
- Both strings only contain lowercase alphabetical characters $(a \dots z)$.

Output

Print string *X* which satisfies the given conditions. Otherwise print -1.

Sample

Input	Output
bcadca dacb	badc
icpccentral nccai	iccna
uuuuuu uzt	-1