

D. Suitable Replacement

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

You are given two strings s and t consisting of small Latin letters, string s can also contain ' ? ' characters.

Suitability of string s is calculated by following metric:

Any two letters can be swapped positions, these operations can be performed arbitrary number of times over any pair of positions. Among all resulting strings s , you choose the one with the largest number of **non-intersecting** occurrences of string t . *Suitability* is this number of occurrences.

You should replace all ' ? ' characters with small Latin letters in such a way that the *suitability* of string s is maximal.

Input

The first line contains string s ($1 \leq |s| \leq 10^6$).

The second line contains string t ($1 \leq |t| \leq 10^6$).

Output

Print string s with ' ? ' replaced with small Latin letters in such a way that *suitability* of that string is maximal.

If there are multiple strings with maximal *suitability* then print any of them.

Examples

input
?aa? ab
output
baab

input
??b? za
output
azbz

input
abcd abacaba
output
abcd

Note

In the first example string "baab" can be transformed to "abab" with swaps, this one has *suitability* of 2. That means that string "baab" also has *suitability* of 2.

In the second example maximal *suitability* you can achieve is 1 and there are several dozens of such strings, "azbz" is just one of them.

In the third example there are no ' ? ' characters and the *suitability* of the string is 0.