

C. Title

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

Vasya has recently finished writing a book. Now he faces the problem of giving it the title. Vasya wants the title to be vague and mysterious for his book to be noticeable among others. That's why the title should be represented by a single word containing at least once each of the first k Latin letters and not containing any other ones. Also, the title should be a palindrome, that is it should be read similarly from the left to the right and from the right to the left.

Vasya has already composed the approximate variant of the title. You are given the title template s consisting of lowercase Latin letters and question marks. Your task is to replace all the question marks by lowercase Latin letters so that the resulting word satisfies the requirements, described above. Each question mark should be replaced by exactly one letter, it is not allowed to delete characters or add new ones to the template. If there are several suitable titles, choose the first in the alphabetical order, for Vasya's book to appear as early as possible in all the catalogues.

Input

The first line contains an integer k ($1 \leq k \leq 26$) which is the number of allowed alphabet letters. The second line contains s which is the given template. In s only the first k lowercase letters of Latin alphabet and question marks can be present, the length of s is from 1 to 100 characters inclusively.

Output

If there is no solution, print `IMPOSSIBLE`. Otherwise, a single line should contain the required title, satisfying the given template. The title should be a palindrome and it can only contain the first k letters of the Latin alphabet. At that, each of those k letters must be present at least once. If there are several suitable titles, print the lexicographically minimal one.

The lexicographical comparison is performed by the standard $<$ operator in modern programming languages. The line a is lexicographically smaller than the line b , if exists such an i ($1 \leq i \leq |s|$), that $a_i < b_i$, and for any j ($1 \leq j < i$) $a_j = b_j$. $|s|$ stands for the length of the given template.

Examples

input
3 a?c
output
IMPOSSIBLE

input
2 a??a
output
abba

input
2 ?b?a
output
abba