A. Set of Strings

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

You are given a string q. A sequence of k strings $s_1, s_2, ..., s_k$ is called *beautiful*, if the concatenation of these strings is string q (formally, $s_1 + s_2 + ... + s_k = q$) and the first characters of these strings are distinct.

Find any *beautiful* sequence of strings or determine that the *beautiful* sequence doesn't exist.

Input

The first line contains a positive integer k ($1 \le k \le 26$) — the number of strings that should be in a *beautiful* sequence.

The second line contains string q, consisting of lowercase Latin letters. The length of the string is within range from 1 to 100, inclusive.

Output

If such sequence doesn't exist, then print in a single line "NO" (without the quotes). Otherwise, print in the first line "YES" (without the quotes) and in the next k lines print the *beautiful* sequence of strings $s_1, s_2, ..., s_k$.

If there are multiple possible answers, print any of them.

Examples

input
1 abca
output
YES abca

input
2 aaacas
output
YES aaa cas

input
4 abc
output
NO

Note

In the second sample there are two possible answers: $\{"aaaca", "s"\}$ and $\{"aaa", "cas"\}$.