

E. Restoring Increasing Sequence

time limit per test: 1 second

memory limit per test: 256 megabytes

input: standard input

output: standard output

Peter wrote on the board a strictly increasing sequence of positive integers a_1, a_2, \dots, a_n . Then Vasil replaced some digits in the numbers of this sequence by question marks. Thus, each question mark corresponds to exactly one lost digit.

Restore the the original sequence knowing digits remaining on the board.

Input

The first line of the input contains integer n ($1 \leq n \leq 10^5$) — the length of the sequence. Next n lines contain one element of the sequence each. Each element consists only of digits and question marks. No element starts from digit 0. Each element has length from 1 to 8 characters, inclusive.

Output

If the answer exists, print in the first line "YES" (without the quotes). Next n lines must contain the sequence of positive integers — a possible variant of Peter's sequence. The found sequence must be strictly increasing, it must be transformed from the given one by replacing each question mark by a single digit. All numbers on the resulting sequence must be written without leading zeroes. If there are multiple solutions, print any of them.

If there is no answer, print a single line "NO" (without the quotes).

Examples

input
3 ? 18 1?
output
YES 1 18 19

input
2 ?? ?
output
NO

input
5 12224 12??5 12226 ?0000 ?00000
output
YES 12224

12225	
12226	
20000	
100000	