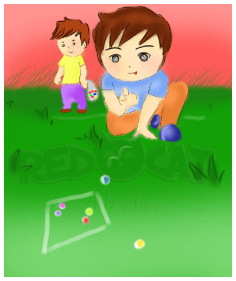
Problem A
Arranging Marbles

The game of marbles (or shooting marbles) is very popular for kids in many countries. In Vietnam, the most classic way to play this game is to shoot your marbles at opponents' ones to get it.



Hieu is a truly professional player and has won many games, which brought him a collection of rare colorful marbles. His collection consists of n^2 marbles which are colored in at most $n+1$ different colors. The marbles are numbered from 1 to n^2, and the colors are numbered from 1 to $n+1$ (inclusive). Hieu wants to put his n^2 marbles in n boxes so that the following conditions hold:

- Each box consists of exactly n marbles;
- The marbles in each box are colored in at most 2 colors.

Given the color of all Hieu's marbles, your task is to help him arrange them.

Input

- The first line contains an integer n ($1 \le n \le 1\,000$).
- The second line contains n^2 integers $c_1, c_2, \cdots, c_{n^2}$ ($1 \le c_i \le n+1$), where c_i denotes the color of the i-th marble. There might be a color which never appears in any marbles.

Output

If it is impossible to arrange Hieu's marbles, print a single word `NO`. Otherwise:

- The first line contains the word `YES`.
- The second line contains n^2 integers $b_1, b_2, \ldots, b_{n^2}$ ($1 \le b_i \le n$) where b_i denotes the box which has the i-th marble.

If there are multiple solutions, you can output any of them.

Sample Input 1	Sample Output 1
3 1 1 1 1 3 3 3 3 3	YES 1 1 2 2 1 2 3 3 3