B. Painting Pebbles

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

There are n piles of pebbles on the table, the i-th pile contains a_i pebbles. Your task is to paint each pebble using one of the k given colors so that for each color c and any two piles i and j the difference between the number of pebbles of color c in pile i and number of pebbles of color c in pile j is at most one.

In other words, let's say that $b_{i,\,c}$ is the number of pebbles of color c in the i-th pile. Then for any $1 \le c \le k$, $1 \le i, j \le n$ the following condition must be satisfied $|b_{i,\,c} - b_{j,\,c}| \le 1$. It isn't necessary to use all k colors: if color c hasn't been used in pile i, then $b_{i,\,c}$ is considered to be zero.

Input

The first line of the input contains positive integers n and k ($1 \le n, k \le 100$), separated by a space — the number of piles and the number of colors respectively.

The second line contains n positive integers $a_1, a_2, ..., a_n$ ($1 \le a_i \le 100$) denoting number of pebbles in each of the piles.

Output

If there is no way to paint the pebbles satisfying the given condition, output "NO" (without quotes) .

Otherwise in the first line output "YES" (without quotes). Then n lines should follow, the i-th of them should contain a_i space-separated integers. j-th ($1 \le j \le a_i$) of these integers should be equal to the color of the j-th pebble in the i-th pile. **If there are several possible answers, you may output any of them.**

Examples

input
4 4 1 2 3 4

output
YES 1 1 4 1 2 4 1 2 3 4

input
5 2 3 2 4 1 3

output
NO

input
5 4 3 2 4 3 5

output
YES 1 2 3 1 3 1 2 3 4

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1 3 4
1 1 2 3 4
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