## Problem B. Hyper-minimum

Input file: hyper.in
Output file: hyper.out
Time limit: 2 seconds
Memory limit: 256 megabytes

Detailed Feedback: none

There is a 4-dimensional array X, each index of which is in interval from 1 to N. Your task is to construct new 4-dimensional array Y, elements of which can be calculated using the next formula:  $Y[i_1, i_2, i_3, i_4] = min(X[j_1, j_2, j_3, j_4])$ , where  $1 \le i_k \le N - M + 1$ ,  $i_k \le j_k \le i_k + M - 1$ , and M is given.

## Input

First line of the input file contains N and M ( $1 \le M \le N$ ). Next lines of the input file contain elements of array X. The number of elements will be not more than 1500000 and elements will be integers not exceeding  $10^9$  by absolute value. They are given in such order, that the array can be read using following pseudocode:

```
for i = 1 to N:

for j = 1 to N:

for k = 1 to N:

for l = 1 to N:

read X[i, j, k, l]
```

## Output

Output array Y in the same format as the X was given.

## **Examples**

| hyper.in                              | hyper.out                           |
|---------------------------------------|-------------------------------------|
| 1 1                                   | 1                                   |
| 1                                     |                                     |
| 3 2                                   | -5 -5 -4 -3 -5 -5 -4 -5 -5 -5 -5 -5 |
| 3 1 4 -4 0 4 0 0 -3 0 -2 -5 5 3 5 -4  | -4 -5 -4 -5                         |
| 4 -3 -5 -4 -4 5 -1 0 -3 -2 -1 2 -5 -5 |                                     |
| -1 1 1 -4 3 5 3 -3 -3 3 0 1 4 -1 -2 3 |                                     |
| -2 5 4 -1 -5 3 -4 0 -3 -1 3 -1 4 4 -1 |                                     |
| -5 -3 4 -4 5 1 5 -4 3 2 2 -2 -2 4 2   |                                     |
| -4 -3 1 3 1                           |                                     |