

Problem B

Jim's Big Cross Game

Time limit: 3 seconds

Memory limit: 1024 megabytes

Problem Description

It's the end of the semester, and Professor Lee decides to let the students play a game called "Big Cross" (大十字) in the classroom to relax.

The classroom seats are arranged in an $N \times M$ grid. Each student has a unique ID number assigned to their seat.

The rules are simple:

- The professor draws a number from a lottery box.
- The student with that number AND everyone sitting in the same row or same column as that student must stand up immediately.

Jim wants to generate a "Cheat Sheet" visual map. Given the classroom layout and the drawn number (Target ID), please output the entire seating chart showing who needs to stand up.

Input Format

The input consists of multiple test cases until EOF. For each test case, the first line contains two integers N and M (Rows and Columns). The next N lines contain M integers each, representing the student IDs in the grid. The last line contains a single integer Target_ID.

Output Format

For each test case, output the $N \times M$ grid representing the seating chart. Replace the IDs of students who remain seated with '0'. Keep the original IDs of students who must stand up. Every number must be formatted with a width of 3 characters (e.g., using `System.out.printf("%3d", ...)` in Java). Separate numbers in the same row with a single space. And print a blank line between two consecutive cases. Please see the sample output

Technical Specification

- $1 \leq N, M \leq 30$
- $1 \leq \text{ID numbers} \leq N \times M$
- The ID numbers are unique within the grid.
- It is guaranteed that Target_ID exists in the grid.

Sample Input 1

Sample Output 1

```
3 3
1 2 3
4 5 6
7 8 9
5
4 4
1 2 3 4
5 6 7 8
9 10 11 12
13 14 15 16
6
```

```
0 2 0
4 5 6
0 8 0

0 2 0 0
5 6 7 8
0 10 0 0
0 14 0 0
```