**Problem 5 – Blur Filter**

Bojo is a bad photo editor, but he wants to do some amazing pictures for his Facebook page. He can’t do it alone, so he needs your help. For each picture you will be given a **matrix** with pixels. Each pixel has **weight**. The **blur filter** is applied to a certain cell (pixel) and **all cells around** it. **The blur** has **amount**, which needs to be **added to the weight of the pixel** that it blurs. Print the matrix after the blur applied as output.

**Example:** on the picture on the left **apply blur** with amount **2** over the **pixel** at position **[2, 2]**.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 🡪 | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 5 | 8 | 9 | 10 |
| 9 | 10 | 11 | -12 | 9 | 12 | 13 | -10 |
| -13 | 14 | 15 | 16 | -13 | 16 | 17 | 18 |

### Input

The input data should be read from the console.

* The **first line** holds the **blur amount**.
* The **second line** holds the number of rows **r** andcolumns **c** separated by aspace.
* The **next r lines** hold the matrix numbers. Each lines holds **c** integers, separated by space.
* The **last line** holds the **coordinates** **of the blur** – **row** and **column**, separated by space.

The input data will always be valid and in the format described. There is no need to check it explicitly.

### Output

The output should consist of the matrix after the blur filter is applied.

### Constraints

* The **blur amount** will be an integer number in the range [-2,147,483,648...2,147,483,647].
* The **pixel** **weight** will be an integer number in range [-2,147,483,648...2,147,483,647].
* The number of **rows** and **columns** will be an integer number in the range [1...20].

### Examples

|  |  |  |
| --- | --- | --- |
| **Input** | **Output** | **Comments** |
| 9  3 3  1 1 1  1 1 1  1 1 1  1 1 | 10 10 10  10 10 10  10 10 10 | **Blur amount = 9**  Target = **[1, 1]**  **[0, 0] = 1+9; [0, 1] = 1+9;** **[0, 2] = 1+9;**  **[1, 0] = 1+9; [1, 1] = 1+9;** **[1, 2] = 1+9;**  **[2, 0] = 1+9; [2, 1] = 1+9;** **[2, 2] = 1+9;** |
| **Input** | **Output** | |
| 3  3 4  0 -5 4 20  0 20 4 -5  20 4 -5 0  1 2 | 0 -2 7 23  0 23 7 -2  20 7 -2 3 | |