Largest Product

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Description

Your task is to take an **N**-by-**N** grid and determine the greatest product of any **X** adjacent numbers in the same direction (up, down, left, right, or diagonally – think Connect 4).

Example

In this example, **N** = 4 and **X** = 4.

The largest 4-term product in this 4 x 4 grid is 99 * 90 * 80 * 85 = 60588000.

Input

The first line contains two positive integers **N** and **X**. **N** is the size of the grid and **X** is the number of terms to be multiplied together. The next **N** lines each contain **N** whitespace-separated non-negative integers each less than 100.

Limits

1 <= **X** <= **N** <= 10

Output

Output a single line containing the largest **X**-term product in the grid.

Input	Input
4 4 99 1 3 4 1 90 2 4 2 3 80 2 3 4 2 85	5 3 1 2 3 4 5 6 5 4 3 2 3 4 5 6 7 8 7 6 5 4 5 6 7 8 9
Output	**Output**
60588000	504