

1030. Matrix Cells in Distance Order

Description

You are given four integers `row`, `cols`, `rCenter`, and `cCenter`. There is a `rows x cols` matrix and you are on the cell with the coordinates `(rCenter, cCenter)`.

Return *the coordinates of all cells in the matrix, sorted by their **distance** from `(rCenter, cCenter)` from the smallest distance to the largest distance*. You may return the answer in **any order** that satisfies this condition.

The **distance** between two cells `(r1, c1)` and `(r2, c2)` is `|r1 - r2| + |c1 - c2|`.

Example 1:

Input: `rows = 1, cols = 2, rCenter = 0, cCenter = 0`
Output: `[[0,0],[0,1]]`
Explanation: The distances from `(0, 0)` to other cells are: `[0,1]`

Example 2:

Input: `rows = 2, cols = 2, rCenter = 0, cCenter = 1`
Output: `[[0,1],[0,0],[1,1],[1,0]]`
Explanation: The distances from `(0, 1)` to other cells are: `[0,1,1,2]`
The answer `[[0,1],[1,1],[0,0],[1,0]]` would also be accepted as correct.

Example 3:

Input: `rows = 2, cols = 3, rCenter = 1, cCenter = 2`
Output: `[[1,2],[0,2],[1,1],[0,1],[1,0],[0,0]]`
Explanation: The distances from `(1, 2)` to other cells are: `[0,1,1,2,2,3]`
There are other answers that would also be accepted as correct, such as `[[1,2],[1,1],[0,2],[1,0],[0,1],[0,0]]`.

Constraints:

- `1 <= rows, cols <= 100`
- `0 <= rCenter < rows`
- `0 <= cCenter < cols`

