

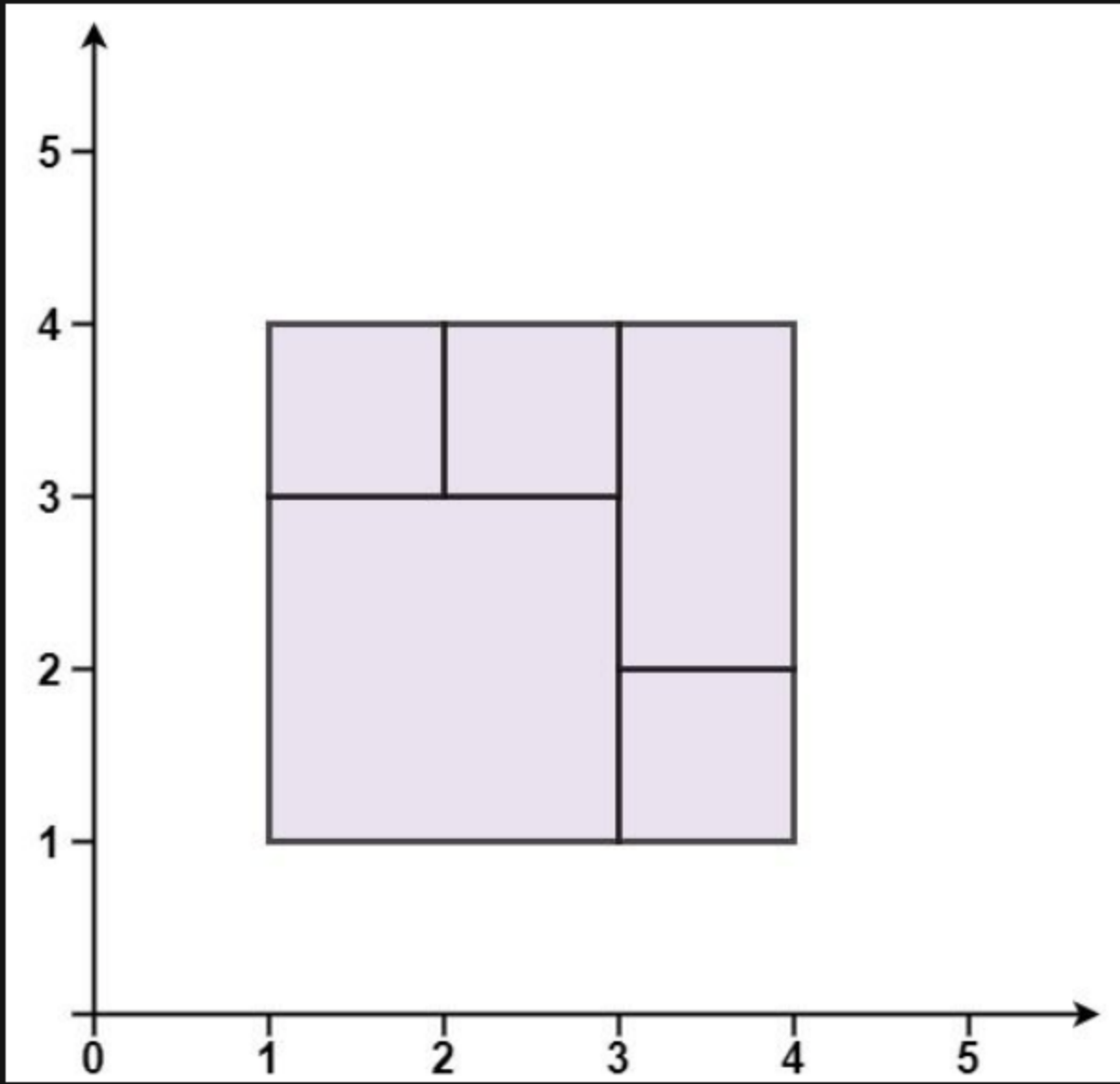
391. Perfect Rectangle

Description

Given an array `rectangles` where `rectangles[i] = [xi, yi, ai, bi]` represents an axis-aligned rectangle. The bottom-left point of the rectangle is `(xi, yi)` and the top-right point of it is `(ai, bi)`.

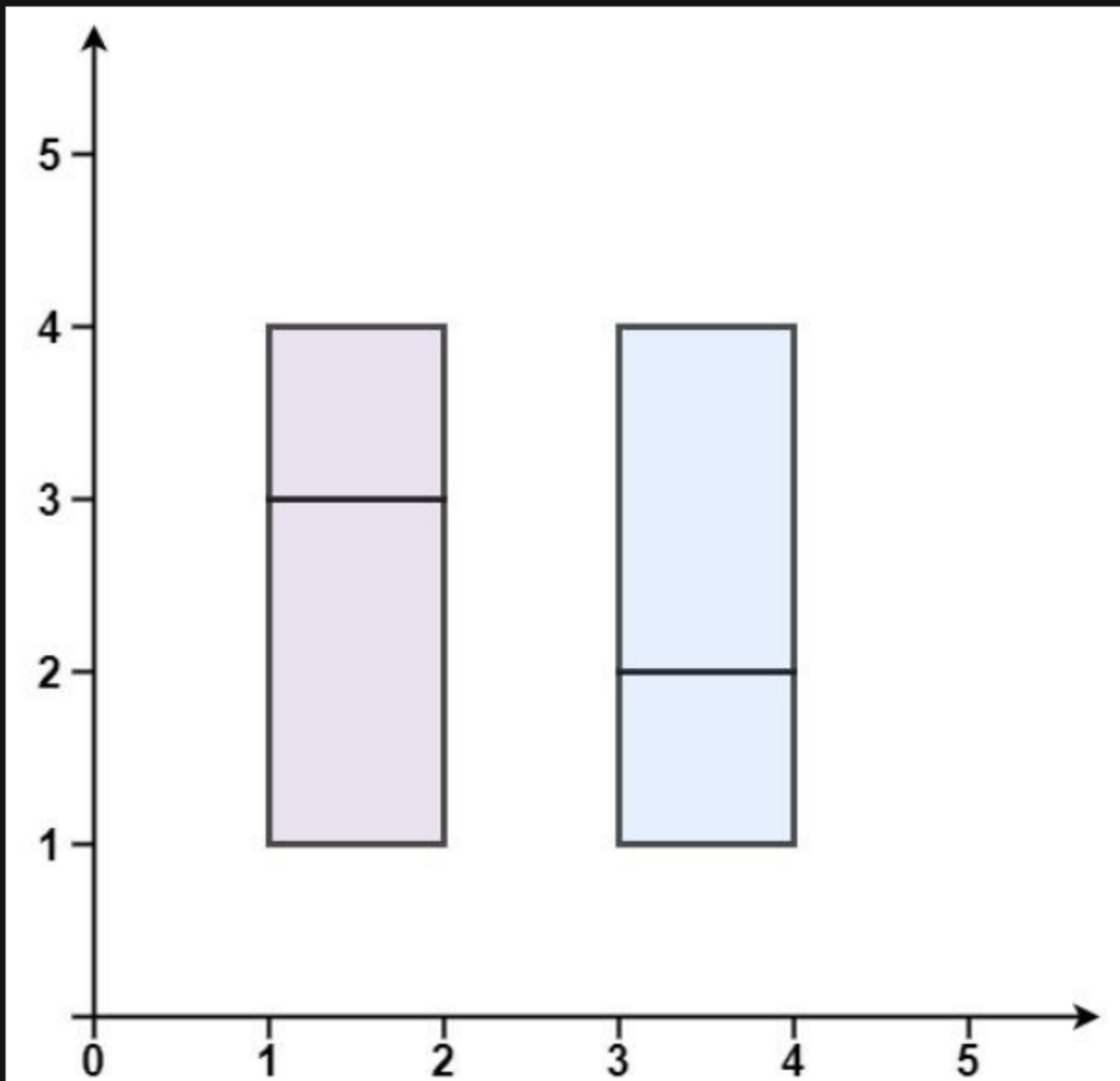
Return `true` if all the rectangles together form an exact cover of a rectangular region.

Example 1:



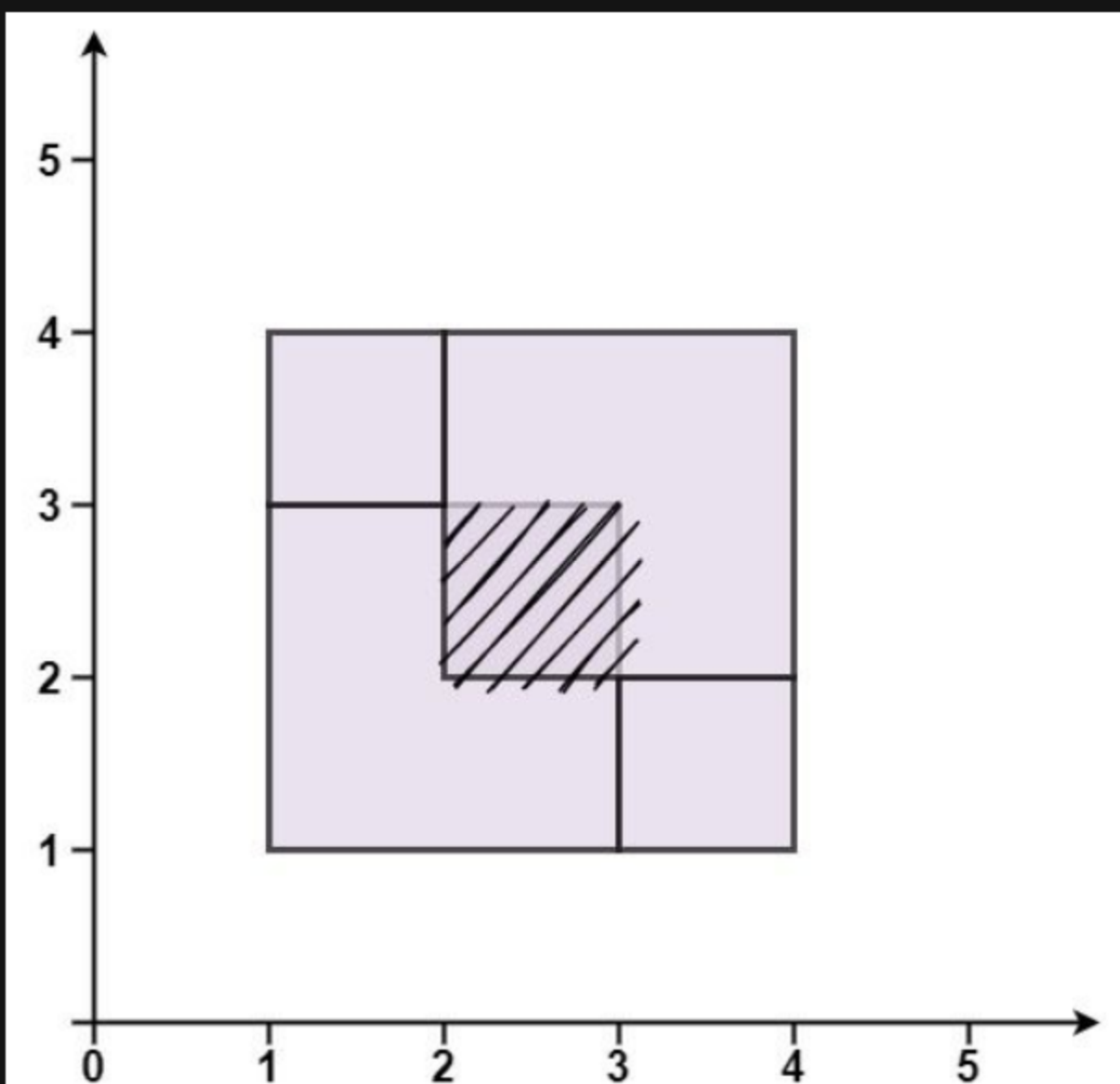
Input: `rectangles = [[1,1,3,3],[3,1,4,2],[3,2,4,4],[1,3,2,4],[2,3,3,4]]`
Output: `true`
Explanation: All 5 rectangles together form an exact cover of a rectangular region.

Example 2:



Input: `rectangles = [[1,1,2,3],[1,3,2,4],[3,1,4,2],[3,2,4,4]]`
Output: `false`
Explanation: Because there is a gap between the two rectangular regions.

Example 3:



Input: `rectangles = [[1,1,3,3],[3,1,4,2],[1,3,2,4],[2,2,4,4]]`
Output: `false`
Explanation: Because two of the rectangles overlap with each other.

Constraints:

- `1 <= rectangles.length <= 2 * 104`
- `rectangles[i].length == 4`
- `-105 <= xi, yi, ai, bi <= 105`

