# 836. Rectangle Overlap

An axis-aligned rectangle is represented as a list [x1, y1, x2, y2], where (x1, y1) is the coordinate of its bottom-left corner, and (x2, y2) is the coordinate of its top-right corner. Its top and bottom edges are parallel to the X-axis, and its left and right edges are parallel to the Y-axis.

Two rectangles overlap if the area of their intersection is positive. To be clear, two rectangles that only touch at the corner or edges do not overlap.

Given two axis-aligned rectangles rec1 and rec2, return true if they overlap, otherwise return false.

### Example 1:

```
Input: rec1 = [0,0,2,2], rec2 = [1,1,3,3]
Output: true
```

## Example 2:

```
Input: rec1 = [0,0,1,1], rec2 = [1,0,2,1]
Output: false
```

## Example 3:

```
Input: rec1 = [0,0,1,1], rec2 = [2,2,3,3]
Output: false
```

#### Constraints:

- rec1.length == 4
- rec2.length == 4
- -109 <= rec1[i], rec2[i] <= 109
- rec1 and rec2 represent a valid rectangle with a non-zero area.

Code:

```
class Solution:
```

```
def isRectangleOverlap(self, rec1: List[int], rec2: List[int]) -> bool:
    x1, y1, x2, y2 = rec1
    x3, y3, x4, y4 = rec2
    if (y1>=y4 or y3>=y2 or x3>=x2 or x1>=x4):
        return False
    else:
        return True
```