

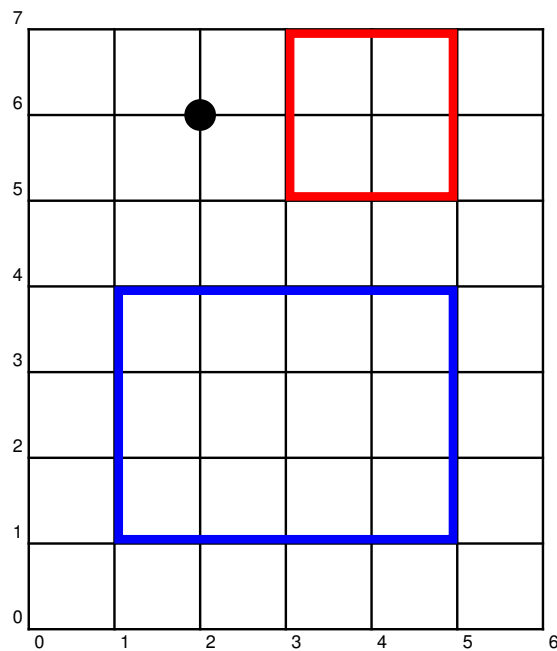
Forest for the Trees

Problem ID: forestforthetrees
Time limit: 1 second

You are playing hide-and-go-seek in a forest with Belle. The forest has one tree at each of the positive integer lattice points. That is, there is a tree at every point (x, y) where x and y are both positive integers. You may consider each tree as a point. A logging company has cut down all of the trees in some axis-aligned rectangle, including those on the boundary of the rectangle.

You are standing at $(0, 0)$ and Belle is standing at (x_b, y_b) . You can see Belle if and only if there is no tree blocking your line of sight to Belle. If there is a tree at (x_b, y_b) , Belle will make it easier for you to find her by standing on the side of the tree facing your location.

For example, suppose that Belle is standing at $(2, 6)$. If the trees in the rectangle with corners at $(1, 1)$ and $(5, 4)$ are cut down (blue rectangle in figure), then you can see Belle. However, if the rectangle was at $(3, 5)$ and $(5, 7)$ (red rectangle in figure), then the tree at $(1, 3)$ would be in the way.



Given the rectangle and Belle's location, can you see her?

Input

The first line of input contains two integer x_b and y_b ($1 \leq x_b, y_b \leq 10^{12}$), which are the coordinates that Belle is standing on.

The second line of input contains four integers x_1, y_1, x_2 and y_2 ($1 \leq x_1 \leq x_2 \leq 10^{12}$ and $1 \leq y_1 \leq y_2 \leq 10^{12}$), which specify two opposite corners of the rectangle at (x_1, y_1) and (x_2, y_2) .

Output

If you can see Belle, display `Yes`.

Otherwise, display `No` and the coordinates of the closest tree that is blocking your view.

Sample Input 1

```
2 6
1 1 5 4
```

Sample Output 1

```
Yes
```

Sample Input 2

2 6
3 5 5 7

Sample Output 2

No
1 3

Sample Input 3

830844890448 39710592053
821266 42860 402207107926 423171345006

Sample Output 3

No
402207964848 19223704203