Rectangular Picture

Problem ID: picture

For the Quora Drawing Challenge 2022, we drew a rectangular picture in an interesting way. First, we put n pins on a coordinate system. If any 4 pins form a rectangle whose edges are parallel to the coordinate axes, we draw that rectangle. After the Challenge had concluded, we realized that there are lots of rectangles in the resulting picture. Count how many rectangles there are in the picture.

Input

Your program will receive input from standard input.

The first line contains a positive integer n representing the number of pins.

In the following n lines, the i-th line contains two positive integers x_i and y_i representing the location of the i-th pin.

Output

Your program should write to standard output.

Print exactly one line containing a single integer: the number of rectangles in the resulting picture.

Constraints

- $1 \leq n \leq 3 \cdot 10^3$
- $-10^9 \leq x_i, y_i \leq 10^9$

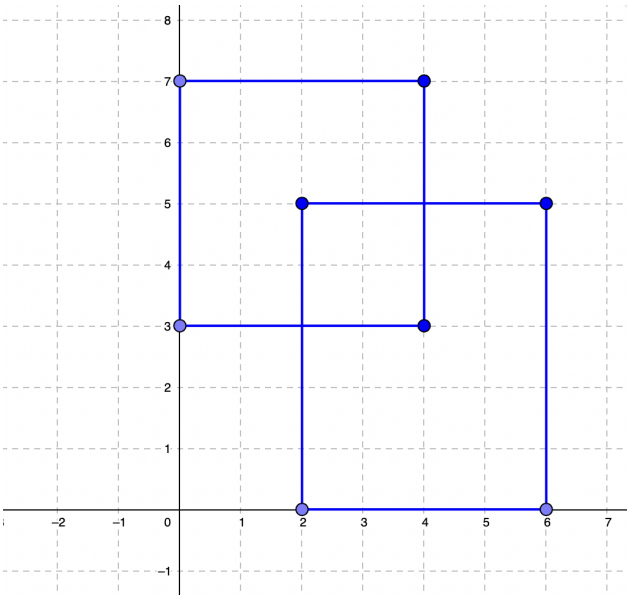
Subtasks

You will get points for each subtask when you pass all of the testcases of the subtask.

1. $n \leq 10^2$ (17 points)
2. $0 \leq y_i \leq 1$ (19 points)
3. No additional constraints (64 points)

Sample Explanation

For Sample Input 1, the pins and resulting rectangles are shown below.



2 rectangles are drawn for the given pins, and there are 3 rectangles in the resulting picture. The 3 rectangles are:

- $(0, 3) - (4, 3) - (4, 7) - (0, 7)$
- $(2, 3) - (4, 3) - (4, 5) - (2, 5)$
- $(2, 0) - (6, 0) - (6, 5) - (2, 5)$

Sample Input 1	Sample Output 1
8 0 3 0 7 4 3 4 7 2 0 2 5 6 0 6 5	3

Sample Input 2	Sample Output 2
8 2 1 3 1 1 2 4 2 1 3 4 3 2 4 3 4	11