Rectangles

You are given a set S of N points in the plane and must count the number of distinct axis-parallel rectangles whose four vertices all lie in S (that is, count those rectangles which have two sides parallel to the **x**-axis, and the other two sides parallel to the **y**-axis).

Input

The first line of the input is N ($1 \leq N \leq 250000$), the number of points in S. N lines then follow, where the **i**-th line is of the form "$x_i\ y_i$", giving the coordinates of a point (x_i, y_i) in S. All given points are distinct, and all coordinates fit into a 32-bit signed integer.

Output

Your output should consist of a single number, the number of distinct axis-parallel rectangles whose four vertices all lie in S, followed by a newline.

Example

Input:
```
6
-1 0
-1 1
0 0
0 1
1 0
1 1
```

Output:
```
3
```