D. Sereja and Squares

time limit per test: 2 seconds
memory limit per test: 512 megabytes
input: standard input
output: standard output

Sereja has painted n distinct points on the plane. The coordinates of each point are integers. Now he is wondering: how many squares are there with sides parallel to the coordinate axes and with points painted in all its four vertexes? Help him, calculate this number.

Input

The first line contains integer n ($1 \le n \le 10^5$). Each of the next n lines contains two integers x_i, y_i ($0 \le x_i, y_i \le 10^5$), the integers represent the coordinates of the i-th point. It is guaranteed that all the given points are distinct.

Output

In a single line print the required number of squares.

Examples

input
5 0 0 0 2 2 0 2 2 1 1
output
1

input
9 0 0 1 1 2 2 0 1 1 0 0 2 2 0 1 2 2 1
output
5

Codeforces Round #243 (Div. 1)
Finished

→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ACM-ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ Problem tags

binary search | data structures | hashing

No tag edit access

→ Contest materials

- Announcement
- Tutorial