B. Number of Triplets

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

You are given n points on a plane. All points are different.

Find the number of different groups of three points (A, B, C) such that point B is the middle of segment AC.

The groups of three points are considered unordered, that is, if point B is the middle of segment AC, then groups (A, B, C) and (C, B, A) are considered the same.

Input

The first line contains a single integer n $(3 \le n \le 3000)$ — the number of points.

Next n lines contain the points. The i-th line contains coordinates of the i-th point: two space-separated integers x_i, y_i ($-1000 \le x_i, y_i \le 1000$).

It is guaranteed that all given points are different.

Output

Print the single number — the answer to the problem.

Examples

input
3 1 1 2 2 3 3

output
1

input
3 0 0 -1 0 0 1

output
0