Problem G. Good Triangle

Input file:	*standard input*
Output file:	*standard output*
Time limit:	2 seconds
Memory limit:	1024 mebibytes

You are given n distinct points on a two-dimensional plane.

We define the distance between two points $P = (x_1, y_1)$ and $Q = (x_2, y_2)$ as $d(P, Q) = |x_1 - x_2| + |y_1 - y_2|$.

Let us say that three distinct points U, V, W form a *good triangle* if there exists a point T such that $d(U, T) = d(V, T) = d(W, T)$. Note that T does not have to be a lattice point.

Find the number of good triangles that can be formed by the given points.

Input

The first line of the input contains one integer N ($3 \le N \le 5 \cdot 10^5$).

The i-th of the next N lines contains two space-separated integers x_i and y_i, meaning that the coordinate of the i-th point is (x_i, y_i) ($-10^9 \le x_i, y_i \le 10^9$; $(x_i, y_i) \ne (x_j, y_j)$ if $i \ne j$).

Output

Print one integer: the number of good triangles that can be formed by the given points.

Examples

standard input	*standard output*
5 1 -1 1 5 5 7 1 3 4 2	9
10 -2 -1 -2 2 -1 -2 -1 -1 -1 1 0 1 1 -1 1 2 2 -1 2 1	108