
Peer to peer network

Input file: **standard input**
Output file: **standard output**
Time limit: 2 seconds
Memory limit: 256 megabytes

Our friend Gilfoyle is currently working on a peer to peer network problem. He cleverly reduces the problem to a simple problem in 2-D geometry. He now has a set of n points in a 2-D plane with integer coordinates. The i_{th} point is located at (x_i, y_i) . He wants to know the number of pairs (i, j) such that the Euclidean distance between the points i and j is equal to the Manhattan distance between the same two points, i.e. $\text{Euclidean distance}(i, j) = \text{Manhattan distance}(i, j)$. Help him with this task.

Input

First line contains n , number of points in the plane ($1 \leq n \leq 2 * 10^5$).

Each of the following n lines contains two integers x_i, y_i ($|x_i|, |y_i| \leq 10^9$)

Output

Print the total number of such pairs.

Examples

standard input	standard output
3 1 1 7 5 1 5	2
6 0 0 0 1 0 2 -1 1 0 1 1 1	11

Note

All the n points given are considered different, even if they share the same coordinates.

$\text{Euclidean distance}(i, j) = \sqrt{(x_i - x_j)^2 + (y_i - y_j)^2}$

$\text{Manhattan distance}(i, j) = |x_i - x_j| + |y_i - y_j|$