## Problem H: Isosceles Triangles

An isosceles triangle is the one in which exactly two of its sides have the same length. A point in the plane is given by two coordinates, $(x, y)$.

The following graph shows the idea.


Figure 1: Six points, enough to form a few triangles
Your task is to create an algorithm that answers, given N points, how many isosceles triangles do they form?

## Input

The input consists of several test cases. For each test case, the first line has an integer N , the number of points. The next $N$ lines contain two integers, $X_{i}$ and $Y_{i}$, indicating the points in the plane.

$$
1 \leqslant N \leqslant 100 ;-100 \leqslant X_{i}, Y_{i} \leqslant 100
$$

## Output

For each test case, print a single line with an integer, representing the total number of isosceles triangles formed by the N points.
To avoid rounding errors, make sure that in your program two lengths $L_{a}, L_{b}$ are considered equal if $\left|\mathrm{L}_{\mathrm{a}}-\mathrm{L}_{\mathrm{b}}\right|<10^{-6}$.

| Sample Input | Output for Sample Input |
| :--- | :--- |
| 6 | 4 |
| -4 | 1 |
| -3 | 3 |
| -2 | 1 |
| -2 | 0 |
| -1 | 1 |
| -1 | -1 |
| 3 | 0 |
| -4 | 1 |
| -2 | 1 |
| -1 | 1 |

