# **12816** 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.

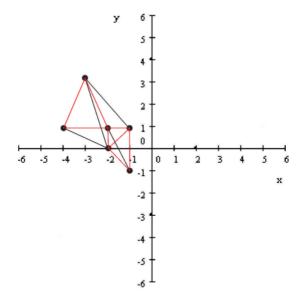


Figure 1: Six points, enough to form a few triangles

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.

 $1 \le N \le 100; -100 \le X_i, Y_i \le 100$ 

#### 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  $|L_a - L_b| < 10^{-6}$ .

#### Sample Input

6

- -4 1
- -33
- -2 1
- -2 0
- -1 1

-1 -1 3 -4 1 -2 1 -1 1

## Sample Output

4

0