Valentine's Day '19 J5 - Falling in Love

Time limit: 1.0s   **Memory limit:** 64M

Winnie has fallen in love with the people from the K-pop band group: BTS. In this group, there are N people. Her love for each person can be modeled as a line of the form $y = mx + b$, with x representing time, and y representing her affection for the person.

You want to know, how many pairs of people will receive the same amount of affection from Winnie at a common point in time (including negative time)?

Input Specification

The first line will contain the integer N $(1 \le N \le 10^5)$, the number of people.

The next N lines will each contain two integers, m, b $(|m|, |b| \le 10^9)$.

Output Specification

Output the number of pairs of people that will receive the same amount of affection from Winnie at a common point in time.

Constraints

Subtask 1 [10%]

$N \le 10^3$

Subtask 2 [90%]

No additional constraints.

Sample Input

```
4
1 3
2 3
0 2
1 2
```

Sample Output

5