

Round 1C 2010

A. Rope Intranet[B. Load Testing](#)[C. Making Chess Boards](#)[Contest Analysis](#)[Questions asked](#)

Submissions

Rope Intranet

9pt	Not attempted 2989/3075 users correct (97%)
13pt	Not attempted 2662/2973 users correct (90%)

Load Testing

14pt	Not attempted 1060/1468 users correct (72%)
22pt	Not attempted 829/1020 users correct (81%)

Making Chess Boards

18pt	Not attempted 640/836 users correct (77%)
24pt	Not attempted 226/547 users correct (41%)

Top Scores

ZhukovDmitry	100
darnley	100
morriship	100
xdliutao	100
Onufry	100
Clann	100
SergeyFedorov	100
kubus	100
K.A.D.R	100
Murphy	100

Problem A. Rope Intranet

This contest is open for practice. You can try every problem as many times as you like, though we won't keep track of which problems you solve. Read the [Quick-Start Guide](#) to get started.

Small input
9 points

Solve A-small

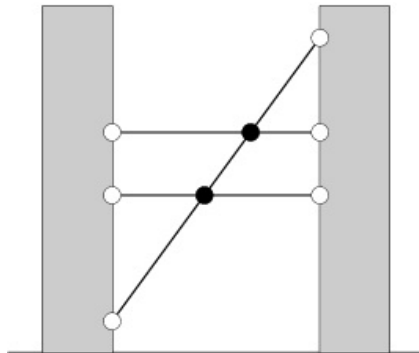
Large input
13 points

Solve A-large

Problem

A company is located in two very tall buildings. The company intranet connecting the buildings consists of many wires, each connecting a window on the first building to a window on the second building.

You are looking at those buildings from the side, so that one of the buildings is to the left and one is to the right. The windows on the left building are seen as points on its right wall, and the windows on the right building are seen as points on its left wall. Wires are straight segments connecting a window on the left building to a window on the right building.



You've noticed that no two wires share an endpoint (in other words, there's at most one wire going out of each window). However, from your viewpoint, some of the wires intersect midway. You've also noticed that exactly two wires meet at each intersection point.

On the above picture, the intersection points are the black circles, while the windows are the white circles.

How many intersection points do you see?

Input

The first line of the input gives the number of test cases, **T**. **T** test cases follow. Each case begins with a line containing an integer **N**, denoting the number of wires you see.

The next **N** lines each describe one wire with two integers **A_i** and **B_i**. These describe the windows that this wire connects: **A_i** is the height of the window on the left building, and **B_i** is the height of the window on the right building.

Output

For each test case, output one line containing "Case #x: y", where x is the case number (starting from 1) and y is the number of intersection points you see.

Limits

 $1 \leq T \leq 15.$
 $1 \leq A_i \leq 10^4.$
 $1 \leq B_i \leq 10^4.$

Within each test case, all **A_i** are different.

Within each test case, all **B_i** are different.

No three wires intersect at the same point.

Small dataset

 $1 \leq N \leq 2.$

Large dataset

 $1 \leq N \leq 1000.$

Sample

Input	Output
2	Case #1: 2
3	Case #2: 0
1 10	
5 5	
7 7	
2	
1 1	
2 2	

All problem statements, input data and contest analyses are licensed under the [Creative Commons Attribution License](#).

© 2008-2017 Google [Google Home](#) - [Terms and Conditions](#) - [Privacy Policies and Principles](#)

Powered by



Google Cloud Platform