

## B. Football Kit

time limit per test: 1 second  
 memory limit per test: 256 megabytes  
 input: standard input  
 output: standard output

Consider a football tournament where  $n$  teams participate. Each team has two football kits: for home games, and for away games. The kit for home games of the  $i$ -th team has color  $x_i$  and the kit for away games of this team has color  $y_i$  ( $x_i \neq y_i$ ).

In the tournament, each team plays exactly one home game and exactly one away game with each other team ( $n(n-1)$  games in total). The team, that plays the home game, traditionally plays in its home kit. The team that plays an away game plays in its away kit. However, if two teams has the kits of the same color, they cannot be distinguished. In this case the away team plays in its home kit.

Calculate how many games in the described tournament each team plays in its home kit and how many games it plays in its away kit.

### Input

The first line contains a single integer  $n$  ( $2 \leq n \leq 10^5$ ) — the number of teams. Next  $n$  lines contain the description of the teams. The  $i$ -th line contains two space-separated numbers  $x_i, y_i$  ( $1 \leq x_i, y_i \leq 10^5$ ;  $x_i \neq y_i$ ) — the color numbers for the home and away kits of the  $i$ -th team.

### Output

For each team, print on a single line two space-separated integers — the number of games this team is going to play in home and away kits, correspondingly. Print the answers for the teams in the order they appeared in the input.

### Sample test(s)

<b>input</b>
2 1 2 2 1
<b>output</b>
2 0 2 0

<b>input</b>
3 1 2 2 1 1 3
<b>output</b>
3 1 4 0 2 2

### Codeforces Round #246 (Div. 2)

Finished

Practice



### → Practice

You are registered for practice. You can solve problems unofficially. Results can be found in the contest status and in the bottom of standings.

### → Submit?

Language:

Choose file:  Der er ikke... nogen fil

Be careful: there is 50 points penalty for submission which fails the pretests or resubmission (except failure on the first test, denial of judgement or similar verdicts). "Passed pretests" submission verdict doesn't guarantee that the solution is absolutely correct and it will pass system tests.


### → Last submissions

Submission	Time	Verdict
<a href="#">6624183</a>	05/15/2014 07:47PM	Accepted

### → Problem tags

[brute force](#) [implementation](#)  
 No tag edit access

### → Contest materials

- Announcement 
- Tutorial 