



Code Chronicles

Sep 10, 2018, 06:00 PM IST - Sep 13, 2018, 12:00 AM IST

← Problems / Priority Interview

Priority Interview

Max. Marks: 30

INSTRUCTIONS

The challenge is over and this problem has been moved to practice area. You can either submit your solution here or Go to Practice Area. Also further submissions won't affect the leaderboard.

JUDGE

PROBLEM

EDITORIAL

PROBLEMS

MY SUBMISSIONS

SUBMISSIONS

Microsoft has come to hire interns from your college. N students got shortlisted out of which few were males and a few females. All the students have been assigned talent levels. Smaller the talent level, lesser is your chance to be selected. Microsoft wants to create the result list where it wants the candidates sorted according to their talent levels, but there is a catch. This time Microsoft wants to hire female candidates first and then male candidates.

the task is to create a list where first all female candidates are sorted in a descending order and then male candidates are sorted in a descending order.

Input Format

The first line contains an integer N denoting the number of students. Next, N lines contain two space-separated integers, ai and bi.

The first integer, ai will be either 1(for a male candidate) or 0(for female candidate).

The second integer, bi will be the candidate's talent level.

Constraints

$$1 <= N <= 10^5$$

$$0 <= ai <= 1$$

$$1 <= bi <= 10^9$$

Output Format

Output $m{N}$ space-separated integers, which first contains the talent levels of all female candidates sorted in descending order and then the talent levels of male candidates in descending order.



