Comparators are used to compare two objects. In this challenge, you'll create a comparator and use it to sort an array.

The *Player* class is provided for you in your editor. It has **2** fields: a *name* String and a *score* integer.

Given an array of n Player objects, write a comparator that sorts them in order of decreasing score; if 2 or more players have the same score, sort those players alphabetically by name. To do this, you must create a Checker class that implements the Comparator interface, then write an int compare(Player a, Player b) method implementing the Comparator.compare(T o1, T o2) method.

Input Format

Input from stdin is handled by the locked stub code in the *Solution* class.

The first line contains an integer, n, denoting the number of players. Each of the n subsequent lines contains a player's name and score, respectively.

Constraints

- $0 \leq score \leq 1000$
- 2 players can have the same name.
- Player names consist of lowercase English letters.

Output Format

You are not responsible for printing any output to stdout. The locked stub code in *Solution* will create a *Checker* object, use it to sort the *Player* array, and print each sorted element.

Sample Input

5 amy 100 david 100 heraldo 50 aakansha 75 aleksa 150

Sample Output

aleksa 150 amy 100 david 100 aakansha 75 heraldo 50