Sorting: Comparator

HackerRank

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 in the editor below. It has two fields:

- 1. *name*: a string.
- 2. *score*: an 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 ascending 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. In short, when sorting in ascending order, a comparator function returns -1 if a < b, 0 if a = b, and 1 if a > b.

Declare a *Checker* class that implements the *comparator* method as described. It should sort first descending by score, then ascending by name. The code stub reads the input, creates a list of Player objects, uses your method to sort the data, and prints it out properly.

Example

```
n=3\ data=[[Smith,20],[Jones,15],[Jones,20]]
```

Sort the list as $data_{sorted} = [[Jones, 20], [Smith, 20], [Jones, 15]]$. Sort first descending by score, then ascending by name.

Input Format

The first line contains an integer, n, the number of players. Each of the next n lines contains a player's *name* and *score*, a string and an integer.

Constraints

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

Output Format

You are not responsible for printing any output to stdout. Locked stub code in *Solution* will instantiate 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

Explanation

The players are first sorted descending by score, then ascending by name.