

1285 - Final Standings

Description

Old contest software uses bubble sort for generating final standings. But now, there are too many teams and that software works too slow. You are asked to write a program, which generates exactly the same final standings as old software, but fast.

Input specification

The first line of input contains only integer $1 < N \leq 100000$ (number of teams). Each of the next N lines contains two integers $1 \leq ID \leq 100000$ and $0 \leq M \leq 100$. ID (unique number of team), M (number of solved problems).

Output specification

Output should contain N lines with two integers ID and M on each. Lines should be sorted by M in descending order using bubble sort (or analog).

Sample input

```
8
1 2
16 3
11 2
20 3
3 5
26 4
7 1
22 4
```

Sample output

```
3 5
26 4
22 4
16 3
20 3
```

1 2
11 2
7 1

Hint(s)

Exactly the same rankings as old software means you should respect the fact that if team A is before team B in the unordered list, then team A must be before team B in the ordered one as well.

Source	Timus Online Judge
Added by	ejaltuna
Addition date	2011-10-12 23:40:41.0
Time limit (ms)	2000
Test limit (ms)	1000
Memory limit (kb)	65536
Output limit (mb)	64
Size limit (bytes)	100000
Enabled languages	C C# C++ Java Pascal Perl PHP Python Ruby Text