A. Winner

time limit per test: 1 second
memory limit per test: 64 megabytes
input: standard input
output: standard output

The winner of the card game popular in Berland "Berlogging" is determined according to the following rules. If at the end of the game there is only one player with the maximum number of points, he is the winner. The situation becomes more difficult if the number of such players is more than one. During each round a player gains or loses a particular number of points. In the course of the game the number of points is registered in the line "name score", where name is a player's name, and score is the number of points gained in this round, which is an integer number. If score is negative, this means that the player has lost in the round. So, if two or more players have the maximum number of points (say, it equals to m) at the end of the game, than wins the one *of them* who scored at least m points first. Initially each player has 0 points. It's guaranteed that at the end of the game at least one player has a positive number of points.

Input

The first line contains an integer number n ($1 \le n \le 1000$), n is the number of rounds played. Then follow n lines, containing the information about the rounds in "name score" format in chronological order, where name is a string of lower-case Latin letters with the length from 1 to 32, and score is an integer number between -1000 and 1000, inclusive.

Output

Print the name of the winner.

Examples

input
3 mike 3 andrew 5 mike 2
output
andrew

input
3 andrew 3 andrew 2 mike 5
output
andrew

→ Attention

Package for this problem was not updated by the problem writer or Codeforces administration after we've upgraded the judging servers. To adjust the time limit constraint, solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then value 800 ms will be displayed and used to determine the verdict.

Codeforces Beta Round #2

Finished

→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ACM-ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ Problem tags

hashing implementation

No tag edit access

→ Contest materials

- Announcement
- Tutorial #1
- Tutorial #2