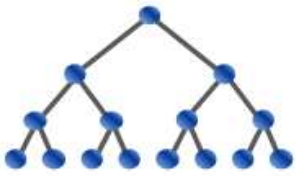
USA Computing Olympiad



USACO 2017 JANUARY CONTEST, BRONZE
PROBLEM 1. DON'T BE LAST!

Return to Problem List

Contest has ended.

Submitted; Results below show the outcome for each judge test case

1	2	3	4	5	6	7	8	9	10	11
*	*	*	*	*	*	*	*	*	*	*
31.6mb 378ms	33.7mb 388ms	34.0mb 387ms	33.1mb 407ms	33.7mb 415ms	34.1mb 404ms	34.4mb 437ms	33.1mb 421ms	33.3mb 430ms	33.7mb 394ms	33.8mb 394ms

English (en)

Farmer John owns 7 dairy cows: Bessie, Elsie, Daisy, Gertie, Annabelle, Maggie, and Henrietta. He milks them every day and keeps detailed records on the amount of milk provided by each cow during each milking session. Not surprisingly, Farmer John highly prizes cows that provide large amounts of milk.

Cows, being lazy creatures, don't necessarily want to be responsible for producing too much milk. If it were up to them, they would each be perfectly content to be the lowest-producing cow in the entire herd. However, they keep hearing Farmer John mentioning the phrase "farm to table" with his human friends, and while they don't quite understand what this means, they have a suspicion that it actually may not be the best idea to be the cow producing the least amount of milk. Instead, they figure it's safer to be in the position of producing the second-smallest amount of milk in the herd. Please help the cows figure out which of them currently occupies this desirable position.

INPUT FORMAT (file notlast.in):

The input file for this task starts with a line containing the integer N ($1 \leq N \leq 100$), giving the number of entries in Farmer John's milking log.

Each of the N following lines contains the name of a cow (one of the seven above) followed by a positive integer (at most 100), indicating the amount of milk produced by the cow during one of its milking sessions.

Any cow that does not appear in the log at all is assumed to have produced no milk.

OUTPUT FORMAT (file notlast.out):

On a single line of output, please print the name of the cow that produces the second-smallest amount of milk. More precisely, if M is the minimum total amount of milk produced by any cow, please output the name of the cow whose total production is minimal among all cows that produce more than M units of milk. If several cows tie for this designation, or if no cow has this designation (i.e., if all cows have production equal to M), please output the word "Tie". Don't forget to add a newline character at the end of your line of output. Note that $M = 0$ if one of the seven cows is completely absent from the milking log, since this cow would have produced no milk.

SAMPLE INPUT:

```
10
Bessie 1
Maggie 13
Elsie 3
Elsie 4
Henrietta 4
Gertie 12
Daisy 7
Annabelle 10
Bessie 6
Henrietta 5
```

SAMPLE OUTPUT:

```
Henrietta
```

In this example, Bessie, Elsie, and Daisy all tie for the minimum by each producing 7 units of milk. The next-largest production, 9 units, is due to Henrietta.

Problem credits: Brian Dean

Language: C

Source File: Choose File No file chosen

Submit Solution

Note: Many issues (e.g., uninitialized variables, out-of-bounds memory access) can cause a program to product different output when run multiple times; if your program behaves in a manner inconsistent with the official contest results, you should probably look for one of these issues. Timing can also differ slightly from run to run, so it is possible for a program timing out in the official results to occasionally run just under the time limit in analysis mode, and vice versa. Note also that we have recently changed grading servers, and since our new servers run at different speeds from the servers used during older contests, timing results for older contest problems may be slightly off until we manage to re-calibrate everything properly.