

2752 - Incredible Penguins

Description

Penguins, are singular animals, well-know for being birds dwelling on the North Pole, they are also famous for being one of few species that practice monogamy (there's been said that humans ocasionally practice it too).

The UPR (Unlimited Penguins Resort) is a Pinar Del Río – based resort to study these animals. It hosts N penguins, each one has a name S (no more than 10 chars with no spaces) and an ID, which is an integer $1 \leq |ID| \leq 1000$ that also identifies the animal. There can be penguins with the same name but no two penguins share the same ID. It turns out that male penguins' IDs are always greater than zero, and for females IDs are always lower than zero. Scientifics have found that a penguin with $ID = K$ can only mate with a female penguin with $ID = -K$, penguins that cannot mate within the resort are tagged as "FOREVER ALONE".

Given the list of penguins your task is to list the FOREVER ALONE ones.

Input specification

The first line contain a integer number $1 \leq N \leq 100$, the amount of penguins on the resort. Then follows N lines, each containing a string and a integer numbers which are name and ID for penguin number i .

Output specification

Print the label: "FOREVER ALONE ones:" in a line itself. Then print the names of the penguins who meet that condition, one per line in appearance order.

Sample input

```
4
Luis 5
Julia -23
Aniceto 14
Vivian -5
```

Sample output

```
FOREVER ALONE ones:
Julia
```

Aniceto

Hint(s)

Source	Luis Manuel Díaz Barón
Added by	ymondelo20
Addition date	2014-03-11
Time limit (ms)	15000
Test limit (ms)	1500
Memory limit (kb)	256000
Output limit (mb)	64
Size limit (bytes)	15000
Enabled languages	Bash C C# C++ Java Pascal Perl PHP Python Ruby Text