PROBLEM 1 - JELLY

A local school provides jelly for their pupils every day, and the school staff are very careful to see that each child has exactly the same amount.

The jelly is prepared the previous day; the liquid jelly is poured into rectangular sided moulds, one mould per child, and then put in the fridge where it sets. The moulds may differ by the length and width of their sides but are filled to different heights so that they all have the same volume; length, width, and height are always integer numbers.

Unfortunately, one of the cleaners loves practical jokes! Whenever he can, before the jelly has set, he tips liquid jelly from one of the moulds into another. He is happy if he succeeds just once and doesn't repeat the joke with other moulds.

Your task is to help the school staff by preparing a report for them. They need to know who has lost jelly and who has gained it so that they can correct matters before the children arrive.

INPUT FORMAT

The input consists of one or more scenarios. Each scenario begins with a single integer n, $1 \leq n \leq 100$, representing the number of children for whom jelly was prepared. Following this are n lines, each line representing one child. The data for a child consists of the child's name and 3 integer numbers in the range 1 to 100, respectively representing the length, width and height of the jelly in that child's mould, all separated by single spaces. A child's name consists of a sequence of 1 up to 10 letters (upper and/or lower case), and no two children have the same name. A single 0 on a line by itself marks the end of input.

SAMPLE INPUT

```
3
Joe 10 10 2
Susan 10 5 4
Bill 5 5 8
4
Zoe 10 2 2
Lee 6 5 2
Alan 5 4 4
Tommy 12 5 1
0
```

OUTPUT FORMAT

Your report consists of one line of text per scenario. If the cleaner did not manage to transfer any jelly before it set, your report must say

        No child has lost jelly.

If the cleaner did manage to transfer jelly, your report must be of the form

        ChildA has lost jelly to *ChildB*.

where *ChildA* is the actual name of the child that has lost jelly and *ChildB* is the actual name of the child that has gained jelly.

SAMPLE OUTPUT

```
No child has lost jelly.
Zoe has lost jelly to Alan.
```