

Task F. King of Misopotamia (1 point)

The king of Misopotamia is a very generous man: when they come to him and ask for help, he gives exactly one of the most expensive gift he has in the treasury. He also has another interesting feature – he accepts any gift presented to him. But he cannot receive visitors all day, so only N people can get to him per day. For each visitor, the vizier keeps a record. In order not to write a lot, the vizier came up with a system: if a visitor brought a gift in the amount of S , then in the protocol he writes 0 S , and if he asks for help, then 1.

Retrieve the list of King-given gifts according to the protocol.

Input format

The first line contains the number of visitors N ($1 \leq N \leq 100000$). This is followed by N lines, in the i -th of which there is an entry about the i -th visitor.

It is guaranteed that at the time of issuing a gift in the treasury there is at least one gift, and the cost of prizes is integers in the range from 0 to 10^9 .

Output format

For each line of issue it is necessary to print a number in a separate line – the value of the issued gift.

Sample input:

```
10
0 941
0 6077
1
0 9560
1
0 12770
1
0 2117
0 1791
1
```

Sample output:

```
6077
9560
12770
2117
```