

Description	My Submissions	Hints/Editorial	AC Submissions	Video Editorials	My Notes (0)
-------------	----------------	-----------------	----------------	------------------	--------------

Set Queries AZ101

?

Ask Doubt

Time-Limit: 1 sec

Score: 0.00/100

Difficulty :

Memory: 256 MB

Accepted Submissions: 100

Description

You have an empty set and can perform the following operations on it:

1. 1 x - Add integer x to the set
2. 2 x - Find the smallest integer that is not present in the set, which is greater than or equal to x.

Input Format

The first line of the input contains one integer T - the number of test cases. Then T test cases follow.

The first line of each test case contains one integer Q - the number of queries.

Each of the next Q lines contain two space-separated integers t_i and x_i - type and value of the query.

Output Format

For each test case, print the answer for the queries.

Constraints

$1 \leq T \leq 10^5$

$1 \leq Q \leq 10^5$

$1 \leq t_i \leq 2$

$1 \leq x_i \leq 10^{12}$

It is guaranteed that the sum of Q over all test cases does not exceed 10^6 .

Sample Input 1

Copy

```
2
4
1 1
1 3
2 1
2 4
3
2 4
1 4
2 4
```

C++14[GCC] ▾

Submit

1