Maximum Element

You have an empty sequence, and you will be given N queries. Each query is one of these three types:

```
1 x  -Push the element x into the stack.
2    -Delete the element present at the top of the stack.
3    -Print the maximum element in the stack.
```

Input Format

The first line of input contains an integer, N. The next N lines each contain an above mentioned query. *(It is guaranteed that each query is valid.)*

Constraints

$1 \le N \le 10^5$

$1 \le x \le 10^9$

$1 \le type \le 3$

Output Format

For each type 3 query, print the maximum element in the stack on a new line.

Sample Input

```
10
1 97
2
1 20
2
1 26
1 20
2
3
1 91
3
```

Sample Output

```
26
91
```