

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**

$1 \leq N \leq 10^5$   
 $1 \leq x \leq 10^9$   
 $1 \leq type \leq 3$

**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