You have an empty sequence, and you will be given

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.

Function Description

Complete the *getMax* function in the editor below.

getMax has the following parameters:

- *string operations[n]:* operations as strings

Returns

- *int[]:* the answers to each type 3 query

Input Format

The first line of input contains an integer,

. The next

lines each contain an above mentioned query.

Constraints

$1<=n<=10^5$

$1<=x<=10^9$

$1<=type<=3$

All queries are valid.

Sample Input

```
STDIN   Function
-----   --------
10      operations[] size n = 10
1 97    operations = ['1 97', '2', '1 20', ....]
2
1 20
2
1 26
1 20
2
3
1 91
3
```

Sample Output

```
26
91
```