

Maximum Element

File for data source: maximum_element.txt

You have an empty sequence (array), 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

$$1 \leq N \leq 105$$

$$1 \leq x \leq 109$$

$$1 \leq type \leq 3$$

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
```

To read the file please use:

```
<?php
$handle = fopen ("maximum_element","r");
$numberOfQueries=intval(fgets($handle)); // is 10 first line from given code
$arr = array();
..... Your code .....
?>
```