PROBLEMS   SUBMIT CODE   MY SUBMISSIONS   STATUS   STANDINGS   CUSTOM INVOCATION

K. max element in stack

time limit per test: 3 seconds❓
memory limit per test: 256 megabytes

You have a stack. And you must do n operations.

Each operation is one of these types:

- $1\ X$, $(-10^{18} \le X \le 10^{18})$, means put X on top of the stack.
- 2 , means remove the top element in the stack.

After each operation, you must print the maximum element in the stack.

Input

First line contains n $(1 \le n \le 2*10^6)$, the number operations.

The next n lines contain one type of operation.

It grantee that the stack has at least one element after each operation.

Output

print n lines, the ith contains the maximum element in the stack after the ith operation.

Example

input	Copy
5 1 5 1 3 1 6 2 2	

output	Copy
5 5 6 5 5	

Note

after 1st operation stack contains 5.

after 2nd operation stack contains $5, 3$.

after 3rd operation stack contains $5, 3, 6$.

after 4th operation stack contains $5, 3$.

after 5th operation stack contains 5.

ICPC Assiut University Training - Juniors Phase 1 Sheets-2022

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→ Group Contests ⌄

- Juniors Phase 1 Practice #5 (Bitmask, Bitset, Bits)
- Juniors Phase 1 Practice #4 (Binary search , Two pointers)
- Juniors Phase 1 Practice #3 (STL 2)
- Juniors Phase 1 Practice #2 (STL 1)
- Juniors Phase 1 Practice #1 (Prefix sum , Frequency Array)

Juniors Phase 1 Practice #2 (STL 1)

Finished

Practice

⭐

→ About Time Scaling ⌄

This contest uses time limits scaling policy (depending on a programming language). The system automatically adjusts time limits by the following multipliers for some languages. Despite scaling (adjustment), the time limit cannot be more than 30 seconds. Read the details by the link.

→ Virtual participation ⌄

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

[Start virtual contest]

→ Submit?

Language: [GNU G++20 13.2 (64 bit, win ▾]

Choose file: [Choose File] No file chosen

[Submit]

→ Last submissions

Submission	Time	Verdict
285114620	Oct/10/2024 07:49	Accepted
285114049	Oct/10/2024 07:40	Wrong answer on test 2
285112972	Oct/10/2024 07:24	Wrong answer on test 2