ICPC Assiut University Community





HOME TOP CATALOG CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP ICPC CHALLENGE 🛣

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION

E. Queue

time limit per test: 1 second memory limit per test: 256 megabytes input: standard input output: standard output

You have an empty queue of integers, and q queries in the following format:

- $push \ x$: where $(1 \le x \le 10^9)$ add x in the end of the queue.
- pop: remove the first element in the queue.
- *front*: print the first element in the queue.
- back: print the last element in the queue.

It's guaranteed that in the last 3 types of the query, the queue is not empty

Input

The first line of input contains an integer q ($1 \le q \le 10^5$).

The next q lines contain the queries.

Output

Example

input

6 3 3

3

Print the answer to the queries in separate lines

15 push 5 front back push 6 front back push 3 front back pop front back pop front back output Сору 5 5 5 6 5 3

ICPC Assiut University Training -Standard - Juniors Phase 1

Public

Participant



→ Group Contests



- Standard #4 (Binary search , two
- pointers)
- Standard #3 (set , sorting, compare function , map)
- Standard #2 (binary search, stack, queue, deque, priority queue)
- Standard #1 (Frequency, prefix sum, vector, pair, struct)

Standard #2 (binary search , stack , queue, deque , priority queue)

Finished

Practice

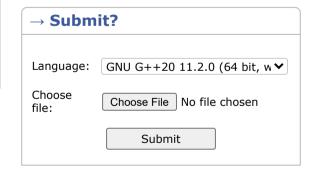


→ Virtual participation

Сору

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



→ Last submissions		
Submission	Time	Verdict
226498583	Oct/03/2023 23:42	Accepted