

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION

F. Deque

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

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

- $push_back\ x$: where $(1 \leq x \leq 10^9)$ add x at the end of the deque.
- $push_front\ x$: where $(1 \leq x \leq 10^9)$ add x at the begin of the deque.
- pop_front : remove the first element in the deque.
- pop_back : remove the last element in the deque.
- $front$: print the first element in the deque.
- $back$: print the last element in the deque.
- $print\ x$: where $(1 \leq x \leq |dq|)$ print the element in index x of the deque.

It's guaranteed that in the last 5 types of the query, the deque is not empty

Input

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

The next q lines contains the queries.

Output

Print the answer to the queries in separate lines

Example

inputCopy

16
push_back 5
front
back
push_back 6
front
back
push_front 3
front
back
print 2
pop_back
front
back
pop_front
front
back

outputCopy

5
5
5
6
3
6
5
3
5
5
5
5

ICPC Assiut University Training - Standard - Juniors Phase 1

Public

Participant

→ Group Contests

- Standard #5 (Bits , bit-masking)
- 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

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 11.2.0 (64 bit, w

Choose file: Choose File No file chosen

Submit

→ Last submissions

Submission	Time	Verdict
226498882	Oct/03/2023 23:47	Accepted