# **ICPC Assiut University Community**

**Juniors Phase 1 Training , Do Your Best** 



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

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  $(1 \le x \le 10^9)$  add x at the end of the deque.
- $push\_front x$ : where  $(1 \le x \le 10^9)$  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.
- ullet 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 ( $1 \le q \le 10^5$ ).

The next q lines contains the queries.

# **Output**

Print the answer to the queries in separate lines

### Example



# <u>ICPC Assiut University Training -</u> <u>Standard - Juniors Phase 1</u>

#### **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**

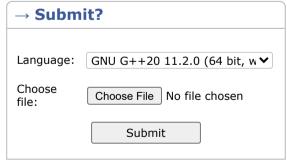
### **Practice**



# → 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



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