

HOME TOP CATALOG CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP RAYAN 罢

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION

B. Digit occurrence Sum

time limit per test: 1.5 seconds memory limit per test: 256 megabytes

Given n distinct non-negative currently available integers a_1, a_2, \ldots, a_n . Define the function count(x) as the number of times the digit x appears in all currently available integers. For any integer k, f(k) is defined as the sum of count(x) for each digit x in k.

For example, let's consider the currently available integers: 70, 123, 311, 125. In this case, count(0) = 1, count(1) = 4, and so on. For f(311), we have count(3) + count(1) + count(1) = 2 + 4 + 4 = 10.

You will be given q queries, each of which can be one of the following three types:

- 1. + k: Add integer k to the currently available integers if it's not already present. If k is already in the list, remove it.
- 2. -k: Delete the k-th largest integer from the currently available integers. If there are fewer than k integers available, skip this operation.
- 3. ? k: Print f(k) if k is currently available among the integers. If k is not available, print -1.

Input

The first line consists of two integers n, q.

Second line consists of n integers a_1, a_2, \dots, a_n .

Next q lines each consist of -k, +k or ?k.

$$1 \leq n,q \leq 3 imes 10^5$$

$$1 \leq a_i \leq 2 \times 10^9$$

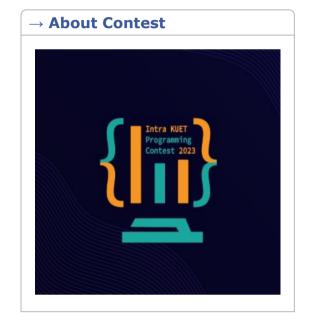
Output

For each "? k" In the query, Print f(k) if k is currently available. Otherwise print -1.

Example

input	Сору
4 6	
70 123 311 125	
? 123	
- 2	
? 123	
+ 234	
- 3	
? 123	
output	Сору
8	
6	
-1	

Replay of Ostad Presents Intra KUET Programming Contest 2023 Finished Practice

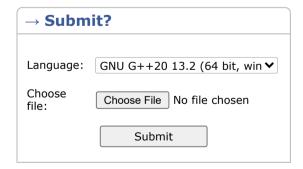


→ Virtual participation

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
302160288	Jan/21/2025 04:47	Accepted
<u>302141471</u>	Jan/20/2025 22:41	Accepted

