



EDU API CALENDAR HOME TOP CONTESTS GYM PROBLEMSET GROUPS RATING

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION

## D. Corrupted Array

time limit per test: 2 seconds memory limit per test: 256 megabytes input: standard input output: standard output

You are given a number n and an array  $b_1, b_2, \dots, b_{n+2}$ , obtained according to the following algorithm:

- some array  $a_1, a_2, \ldots, a_n$  was guessed;
- array a was written to array b, i.e.  $b_i = a_i$  ( $1 \le i \le n$ );
- The (n+1)-th element of the array b is the sum of the numbers in the array a, i.e.  $b_{n+1} = a_1 + a_2 + \ldots + a_n;$
- The (n+2)-th element of the array b was written some number x ( $1 \le x \le 10^9$ ), i.e.  $b_{n+2}=x$ ; The
- array b was shuffled.

For example, the array b = [2, 3, 7, 12, 2] it could be obtained in the following ways:

- a = [2, 2, 3] and x = 12;
- a = [3, 2, 7] and x = 2.

For the given array b, find any array a that could have been guessed initially.

## Input

The first line contains a single integer t ( $1 \le t \le 10^4$ ). Then t test cases follow.

The first line of each test case contains a single integer n ( $1 \le n \le 2 \cdot 10^5$ ).

The second row of each test case contains n+2 integers  $b_1,b_2,\ldots,b_{n+2}$   $(1 \le b_i \le 10^9)$ .

It is guaranteed that the sum of n over all test cases does not exceed  $2 \cdot 10^5$ .

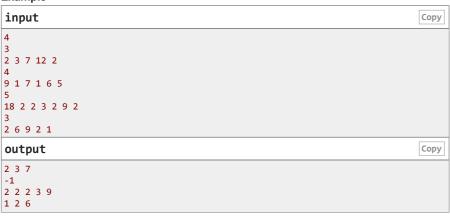
## Output

For each test case, output:

- "-1", if the array b could not be obtained from any array a;
- n integers  $a_1, a_2, \ldots, a_n$ , otherwise.

If there are several arrays of a, you can output any.

## Example







Server time: Apr/10/2021 23:35:40<sup>UTC+9</sup> (i2). Desktop version, switch to mobile version.

<u>Privacy Policy</u>

Supported by



