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 $b_1, b_2, \ldots, b_{n+2}$, 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

input Copy

```
4
3
2 3 7 12 2
4
9 1 7 1 6 5
5
18 2 2 3 2 9 2
3
2 6 9 2 1
```

output Copy

```
2 3 7
-1
2 2 2 3 9
1 2 6
```

Server time: Apr/10/2021 23:35:40^{UTC+9} (i2).
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