Problem B. Build Permutation

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

Given an integer array a of length n, find a permutation π of $\{1, 2, \ldots, n\}$ such that $a_i + a_{\pi_i} = a_j + a_{\pi_j}$ for all $i, j \in \{1, 2, \ldots, n\}$ or report none such permutation exists.

Input

The first line of input contains a single integer n ($1 \le n \le 2 \cdot 10^5$) — the length of the array.

The second line of input contains n integers a_1, a_2, ..., a_n ($0 \le a_i \le 10^9$) — elements of the array.

Output

If no such permutation exists, print -1.

Otherwise, on the first line print $\pi_1, \pi_2, \ldots, \pi_n$. If several such permutations exist, you can output any of them.

Examples

standard input	standard output
5 4 2 5 1 3	2 1 4 3 5
3 2 2 3	-1

Note

In the first sample, we have:

- $a_1 + a_{\pi_1} = a_1 + a_2 = 4 + 2 = 6$
- $a_2 + a_{\pi_2} = a_2 + a_1 = 2 + 4 = 6$
- $a_3 + a_{\pi_3} = a_3 + a_4 = 5 + 1 = 6$
- $a_4 + a_{\pi_4} = a_4 + a_3 = 1 + 5 = 6$
- $a_5 + a_{\pi_5} = a_5 + a_5 = 3 + 3 = 6$

In the second sample, no such permutation exists.