

1734. Decode XORed Permutation

Description

There is an integer array `perm` that is a permutation of the first `n` positive integers, where `n` is always **odd**.

It was encoded into another integer array `encoded` of length `n - 1`, such that `encoded[i] = perm[i] XOR perm[i + 1]`. For example, if `perm = [1,3,2]`, then `encoded = [2,1]`.

Given the `encoded` array, return *the original array* `perm`. It is guaranteed that the answer exists and is unique.

Example 1:

Input: `encoded = [3,1]`

Output: `[1,2,3]`

Explanation: If `perm = [1,2,3]`, then `encoded = [1 XOR 2, 2 XOR 3] = [3,1]`

Example 2:

Input: `encoded = [6,5,4,6]`

Output: `[2,4,1,5,3]`

Constraints:

- `3 <= n < 105`
- `n` is odd.
- `encoded.length == n - 1`

