

6201. Find The Original Array of Prefix Xor

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You are given an **integer** array `pref` of size `n` . Find and return *the array `arr` of size `n` that satisfies:*

- `pref[i] = arr[0] ^ arr[1] ^ ... ^ arr[i]` .

Note that `^` denotes the **bitwise-xor** operation.

It can be proven that the answer is **unique**.

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Medium

Example 1:

**Input:** `pref = [5,2,0,3,1]`  
**Output:** `[5,7,2,3,2]`  
**Explanation:** From the array `[5,7,2,3,2]` we have the following:  
- `pref[0] = 5.`  
- `pref[1] = 5 ^ 7 = 2.`  
- `pref[2] = 5 ^ 7 ^ 2 = 0.`  
- `pref[3] = 5 ^ 7 ^ 2 ^ 3 = 3.`  
- `pref[4] = 5 ^ 7 ^ 2 ^ 3 ^ 2 = 1.`

Example 2:

**Input:** `pref = [13]`  
**Output:** `[13]`  
**Explanation:** We have `pref[0] = arr[0] = 13.`

Constraints:

- `1 <= pref.length <= 105`
- `0 <= pref[i] <= 106`

JavaScript

📄 ↺ ⚙

```
1 const findArray = (a) => {
2   let n = a.length, res = Array(n).fill(0), cur = 0;
3   for (let i = 0; i < n; i++) {
4     let v = a[i] ^ cur;
5     res[i] = v;
6     cur ^= res[i];
7   }
8   return res;
9 };
```

☐ Custom Testcase

Use Example Testcases

Run

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