

1228. Missing Number In Arithmetic Progression Premium

Easy Topics Companies Hint

In some array `arr`, the values were in arithmetic progression: the values `arr[i + 1] - arr[i]` are all equal for every `0 <= i < arr.length - 1`.

A value from `arr` was removed that **was not the first or last value in the array**.

Given `arr`, return *the removed value*.

Example 1:

Input: `arr = [5,7,11,13]`
Output: `9`
Explanation: The previous array was `[5,7,9,11,13]`.

Example 2:

Input: `arr = [15,13,12]`
Output: `14`
Explanation: The previous array was `[15,14,13,12]`.

Constraints:

- `3 <= arr.length <= 1000`
- `0 <= arr[i] <= 105`
- The given array is **guaranteed** to be a valid array.

Seen this question in a real interview before? 1/5

Yes No

Accepted 28.6K | Submissions 54.9K | Acceptance Rate 52.0%

Topics

Array Math

Companies

0 - 6 months

Audible 2

Hint 1

Assume the sequence is increasing, what if we find the largest consecutive difference?

Hint 2

Is the missing element in the middle of the segment with the largest consecutive difference?

Hint 3

For decreasing sequences, just reverse the array and do a similar process.

Discussion (3)