

# 238. Product of Array Except Self

Medium

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Given an integer array `nums`, return *an array* `answer` *such that* `answer[i]` *is equal to the product of all the elements of* `nums` *except* `nums[i]`.

The product of any prefix or suffix of `nums` is **guaranteed** to fit in a **32-bit** integer.

You must write an algorithm that runs in  $O(n)$  time and without using the division operation.

Example 1:

**Input:** `nums = [1,2,3,4]`  
**Output:** `[24,12,8,6]`

Example 2:

**Input:** `nums = [-1,1,0,-3,3]`  
**Output:** `[0,0,9,0,0]`

Constraints:

- $2 \leq \text{nums.length} \leq 10^5$
- $-30 \leq \text{nums}[i] \leq 30$
- The product of any prefix or suffix of `nums` is **guaranteed** to fit in a **32-bit** integer.

**Follow up:** Can you solve the problem in  $O(1)$  extra space complexity? (The output array **does not** count as extra space for space complexity)

Seen this question in a real interview before? 1/4

Yes

No

Accepted 2.2M

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Acceptance Rate 65.2%

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