

## 238. Product of Array Except Self

Solved 

Medium

Topics

Companies

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.