1. Two Sum

Easy Topics Companies Hint

Given an array of integers nums and an integer target, return indices of the two numbers such that they add up to target.

You may assume that each input would have *exactly* one solution, and you may not use the *same* element twice.

You can return the answer in any order.

Example 1:

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Input: nums = [2,7,11,15], target = 9
```

Output: [0,1]

Explanation: Because nums[0] + nums[1] == 9, we return [0, 1].

Example 2:

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Input: nums = [3,2,4], target = 6
```

Output: [1,2]

Example 3:

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Input: nums = [3,3], target = 6
```

Output: [0,1]

Constraints:

- 2 <= nums.length <= 10⁴
- -10⁹ <= nums[i] <= 10⁹
- $-10^9 \le \text{target} \le 10^9$
- Only one valid answer exists.

Follow-up: Can you come up with an algorithm that is less than O(n²) time complexity