

Two Sum Problem

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:

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

Output: `[0,1]`

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

Example 2:

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

Output: `[1,2]`

Explanation: Because `nums[1] + nums[2] == 6`, we return `[1, 2]`.

Example 3:

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

Output: `[0,1]`

Explanation: Because `nums[0] + nums[1] == 6`, we return `[0, 1]`.

Constraints:

- $2 \leq \text{nums.length} \leq 10^4$

- $-10^9 \leq \text{nums}[i] \leq 10^9$

- $-10^9 \leq \text{target} \leq 10^9$

- Only one valid answer exists.