

Source : <https://leetcode.com/problems/two-sum/description/>

Author : Anbang Liu

Date : 10-5-2025

Two Sum

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]`.

1, Brute Force:

`[2,7,11,15]` target = 9



$O(n^2)$

2, Use extra memory space(hash map) to save time

Hash_map:[<2,0>,<7,1>]

[2,7,11,15] target = 9

