

## 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]`.

### **Example 2:**

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

**Output:** `[1,2]`

### **Example 3:**

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

**Output:** `[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.**