

### 1) 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.

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

**Output:** `[0,1]`

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

### 2) Single Number

Given a **non-empty** array of integers `nums`, every element appears *twice* except for one. Find that single one.

You must implement a solution with a linear runtime complexity and use only constant extra space.

#### Example 1:

**Input:** `nums = [2,2,1]`

**Output:** `1`

#### Example 2:

**Input:** `nums = [4,1,2,1,2]`

**Output:** `4`

#### Example 3:

**Input:** `nums = [1]`

**Output:** `1`

### 3) Find First and Last Position of Element in Sorted Array

Given an array of integers `nums` sorted in non-decreasing order, find the starting and ending position of a given `target` value.

If `target` is not found in the array, return `[-1, -1]`.

#### Example 1:

**Input:** `nums = [5,7,7,8,8,10]`, `target = 8`

**Output:** `[3,4]`

#### Example 2:

**Input:** `nums = [5,7,7,8,8,10]`, `target = 6`

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

*Exercises taken from [leetcode.com](https://leetcode.com), array section.*