**1.** Given an array of integers nums, calculate the **pivot index** of this array.

The **pivot index** is the index where the sum of all the numbers **strictly** to the left of the index is equal to the sum of all the numbers **strictly** to the index's right.

If the index is on the left edge of the array, then the left sum is 0 because there are no elements to the left. This also applies to the right edge of the array.

Return *the****leftmost pivot index***. If no such index exists, return -1.

**Example 1:**

**Input:** nums = [1,7,3,6,5,6]

**Output:** 3

**Explanation:**

The pivot index is 3.

Left sum = nums[0] + nums[1] + nums[2] = 1 + 7 + 3 = 11

Right sum = nums[4] + nums[5] = 5 + 6 = 11

**Example 2:**

**Input:** nums = [1,2,3]

**Output:** -1

**Explanation:**

There is no index that satisfies the conditions in the problem statement.

**Example 3:**

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

**Output:** 0

**Explanation:**

The pivot index is 0.

Left sum = 0 (no elements to the left of index 0)

Right sum = nums[1] + nums[2] = 1 + -1 = 0

**Constraints:**

* 1 <= nums.length <= 104
* -1000 <= nums[i] <= 1000

2. Given an integer x, return true*if*x*is a****palindrome****, and*false*otherwise*.

**Example 1:**

**Input:** x = 121

**Output:** true

**Explanation:** 121 reads as 121 from left to right and from right to left.

**Example 2:**

**Input:** x = -121

**Output:** false

**Explanation:** From left to right, it reads -121. From right to left, it becomes 121-. Therefore it is not a palindrome.

**Example 3:**

**Input:** x = 10

**Output:** false

**Explanation:** Reads 01 from right to left. Therefore it is not a palindrome.

**Constraints:**

* -231 <= x <= 231 - 1

3. You are given a **large integer** represented as an integer array digits, where each digits[i] is the ith digit of the integer. The digits are ordered from most significant to least significant in left-to-right order. The large integer does not contain any leading 0's.

Increment the large integer by one and return *the resulting array of digits*.

**Example 1:**

**Input:** digits = [1,2,3]

**Output:** [1,2,4]

**Explanation:** The array represents the integer 123.

Incrementing by one gives 123 + 1 = 124.

Thus, the result should be [1,2,4].

**Example 2:**

**Input:** digits = [4,3,2,1]

**Output:** [4,3,2,2]

**Explanation:** The array represents the integer 4321.

Incrementing by one gives 4321 + 1 = 4322.

Thus, the result should be [4,3,2,2].

**Example 3:**

**Input:** digits = [9]

**Output:** [1,0]

**Explanation:** The array represents the integer 9.

Incrementing by one gives 9 + 1 = 10.

Thus, the result should be [1,0].

**Constraints:**

* 1 <= digits.length <= 100
* 0 <= digits[i] <= 9
* digits does not contain any leading 0's.