**Topic: Missing Number**

Given an array nums containing n distinct numbers in the range [0, n], return the only number in the range that is missing from the array.

**Example 1:**

Input: nums = [3,0,1]

Output: 2

Explanation: n = 3 since there are 3 numbers, so all numbers are in the range [0,3]. 2 is the missing number in the range since it does not appear in nums.

**Example 2:**

Input: nums = [0,1]

Output: 2

Explanation: n = 2 since there are 2 numbers, so all numbers are in the range [0,2]. 2 is the missing number in the range since it does not appear in nums.

**Example 3:**

Input: nums = [9,6,4,2,3,5,7,0,1]

Output: 8

Explanation: n = 9 since there are 9 numbers, so all numbers are in the range [0,9]. 8 is the missing number in the range since it does not appear in nums.

**Prototype in JS (you can do this in any language)**

| **function missingNumber(nums){  }** |
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