Given an integer array nums of length n where all the integers of nums are in the range [1, n] and each integer appears **once** or **twice**, return *an array of all the integers that appears* ***twice***.

You must write an algorithm that runs in O(n) time and uses only constant extra space.

**Example 1:**

Input: nums = [4,3,2,7,8,2,3,1]  
Output: [2,3]

**Example 2:**

Input: nums = [1,1,2]  
Output: [1]

**Example 3:**

Input: nums = [1]  
Output: []

**Constraints:**

* n == nums.length
* 1 <= n <= 105
* 1 <= nums[i] <= n
* Each element in nums appears **once** or **twice**.