

Find All Duplicates in an Array

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**.