

442. Find All Duplicates in an Array

Description

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**.

