442. 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: []
```

```python
class Solution:
    def findDuplicates(self, nums: List[int]) -> List[int]:

        ans = []
        for i in range(len(nums)):
            idx = abs(nums[i])-1
            if nums[idx]<0:
                ans.append(abs(nums[i]))
                # break
            else:
                nums[idx] = -nums[idx]


        return ans
```