Find All Duplicates in an Array

Try to solve the Find All Duplicates in an Array problem.

Statement

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 appear twice.

> **Note:** Make sure to write an algorithm that runs in $O(n)$ time and uses only constant extra space.

Constraints:

- $n ==$ nums.length
- $1 \leq n \leq 10^5$
- $1 \leq$ nums[i] $\leq n$
- Each element in nums appears once or twice.

Examples

Sample example 1

Input

nums	[2, 2, 3, 9, 8, 4, 5, 7, 6]

Output

duplicates	[2]

Sample example 2

Input

nums	[2, 10, 4, 9, 7, 7, 8, 4, 2, 3]

Output

duplicates	[2, 4, 7]

Sample example 3

Input

nums	[1]

- -

Output

duplicates	[]

Understand the problem

Let's take a moment to make sure you've correctly understood the problem. The quiz below helps you check if you're solving the correct problem:

Find All Duplicates in an Array

1

What is the output if the following array is given as input?

nums = [3, 3, 7, 2, 8, 5, 4, 1]

A) [3]

B) [1]

C) [1, 3]

Submit Answer

Question 1 of 2
0 attempted

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Try it yourself

Implement your solution in the following coding playground:

Java

usercode > FindDuplicates.java

```
1  import java.util.*;
2
3  public class FindDuplicates{

        // write your code here
7
8          return new ArrayList<>();
9      }
10 }
```

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Test Cases   Results

| Case 1 | Case 2 | Case 3 |

Input #1

[4,3,2,7,8,2,3,1]

Find All Duplicates in an Array

💡 **Hide Hint**

You might want to go over the Cyclic Sort pattern again.

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Find All Numbers Disa…

Next →

Same Tree

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