[LeetCode](https://leetcode.com/problems/find-all-duplicates-in-an-array/description/?envType=daily-question&envId=2024-03-25)

<https://github.com/AdityaKonda6/-50DaysOfCoding>

<https://leetcode.com/problems/find-all-duplicates-in-an-array/description/?envType=daily-question&envId=2024-03-25>

<https://www.linkedin.com/in/aditya-adi-konda/>

Day 35 of [#50dayscodingchallenge](https://www.linkedin.com/feed/hashtag/?keywords=50dayscodingchallenge&highlightedUpdateUrns=urn:li:activity:7166316239483461633):  
[#leetcode](https://www.linkedin.com/feed/hashtag/?keywords=leetcode&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#leetcodechallenge](https://www.linkedin.com/feed/hashtag/?keywords=leetcodechallenge&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#leetcodestreak](https://www.linkedin.com/feed/hashtag/?keywords=leetcodestreak&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#leetcode2024](https://www.linkedin.com/feed/hashtag/?keywords=leetcode2024&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#leetcode50day](https://www.linkedin.com/feed/hashtag/?keywords=leetcode50day&highlightedUpdateUrns=urn:li:activity:7166316239483461633)  
   
Ventured further into my coding journey today, tackling the engaging LeetCode Problem "Successfully solved LeetCode Problem 🎈💻“442. Find All Duplicates in an Array.”  
   
✨ Task: 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.

Examples:

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: []

Let's Connect:

If you find this problem intriguing or have insights to share, let's connect! I'm passionate about problem-solving, algorithmic thinking, and collaborative learning. Feel free to comment or reach out for engaging discussions and knowledge exchange.Unravel the mystery using your coding skills!

[#CodingChallenge](https://www.linkedin.com/feed/hashtag/?keywords=codingchallenge&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#Algorithm](https://www.linkedin.com/feed/hashtag/?keywords=algorithm&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#LinkedInPost](https://www.linkedin.com/feed/hashtag/?keywords=linkedinpost&highlightedUpdateUrns=urn:li:activity:7166316239483461633) #Algorithm #Optimization #DataStructures #CodingChallenge  
  
Excited about the progress and challenges ahead!  
   
Make Sure You Follow My GitHub For Solutions: <https://github.com/AdityaKonda6/-50DaysOfCoding>  
  
  
Happy coding!

**Solution:-**

class Solution {

  public List<Integer> findDuplicates(int[] nums) {

    List<Integer> ans = new ArrayList<>();

    for (final int num : nums) {

      nums[Math.abs(num) - 1] \*= -1;

      if (nums[Math.abs(num) - 1] > 0)

        ans.add(Math.abs(num));

    }

    return ans;

  }

}

