# Find the Corrupt Pair

Try to solve the Find the Corrupt Pair problem.

## Statement

We are given an unsorted array, `nums`, with $n$ elements and each element is in the range $[1, n]$ inclusive. The array originally contained all the elements from $1$ to $n$ but due to a data error, one of the numbers is duplicated, which causes another number missing. Find and return the corrupt pair (missing, duplicated).

**Constraints:**

- $1 \leq n \leq 10^3$
- $1 \leq$ `nums[i]` $\leq n$

## Examples

**Sample example 1**

**Input**

| Array | 4 | 1 | 2 | 1 | 6 | 3 |
|-------|---|---|---|---|---|---|

**Output**

| 5 | 1 |
|---|---|

The missing number is 5 and the duplicate number is 1.

## 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 the Corrupt Pair

Which is the corrupt pair in the array given below?

[4, 1, 3, 4, 5]

**A)** 2, 3

**B)** 2, 4

**C)** 2, 5

**D)** 2, 6

Submit Answer

Question 1 of 3
0 attempted

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## Figure it out!

We have a game for you to play. Rearrange the logical building blocks to develop a clearer understanding of how to solve this problem.

Drag and drop the cards to rearrange them in the correct sequence.

Apply the cyclic sort to the array.

After sorting, traverse the array and find the number that isn't at its correct position. This will be the duplicate number.

Add 1 to the index of the duplicate number. This will be our missing number.

Return the pair containing the missing and duplicated number.

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## Try it yourself

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🫖 Java    💾  ↻

usercode > FindCorruptPair.java

```java
1  import java.util.*;
2  public class FindCorruptPair{
3      public static int[] findCorruptPair(int[] nums) {
4
5          // Write your code here
6
7          return new int[]{0, 0};
8      }
9  }
```

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**Test Cases**    Results

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**Case 1**    Case 2    Case 3

Input #1

[3,1,2,5,2]

Find the Corrupt Pair

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Solution: First Missing ...

Next →

Solution: Find the Corr...

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