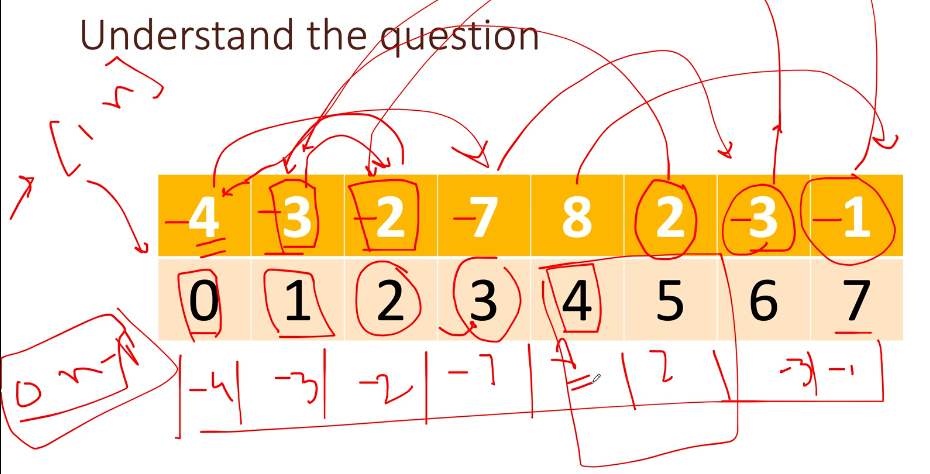
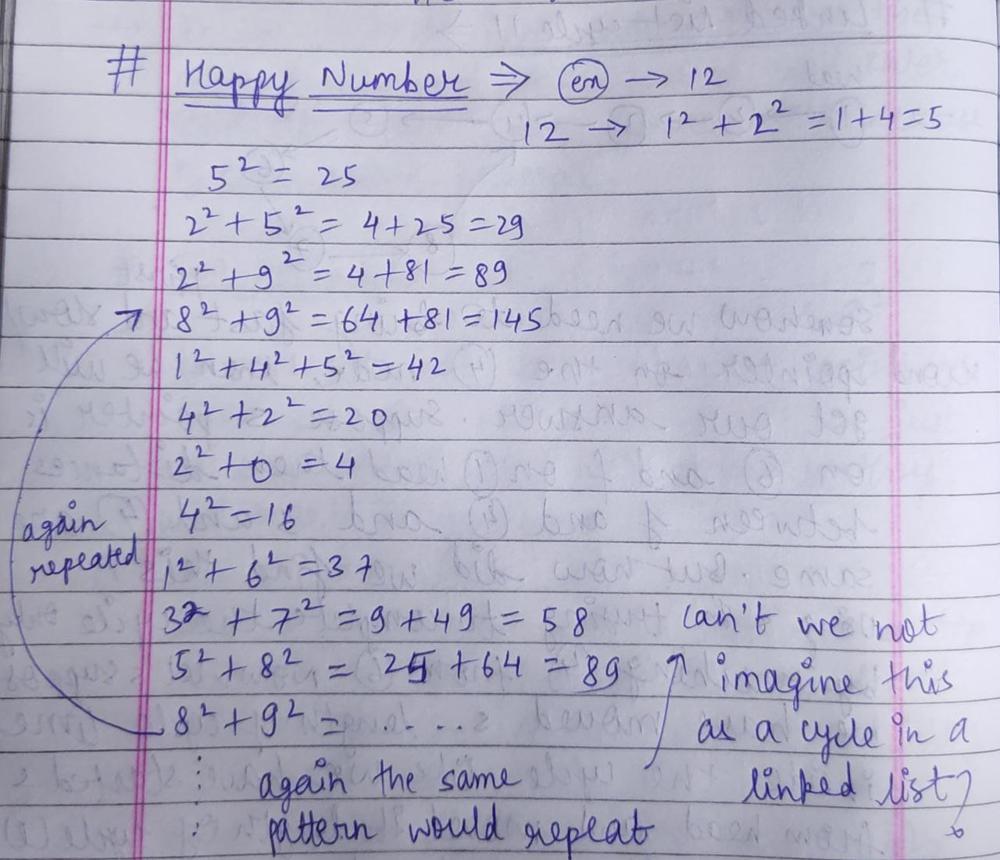
[**448. Find All Numbers Disappeared in an Array**](https://leetcode.com/problems/find-all-numbers-disappeared-in-an-array/)

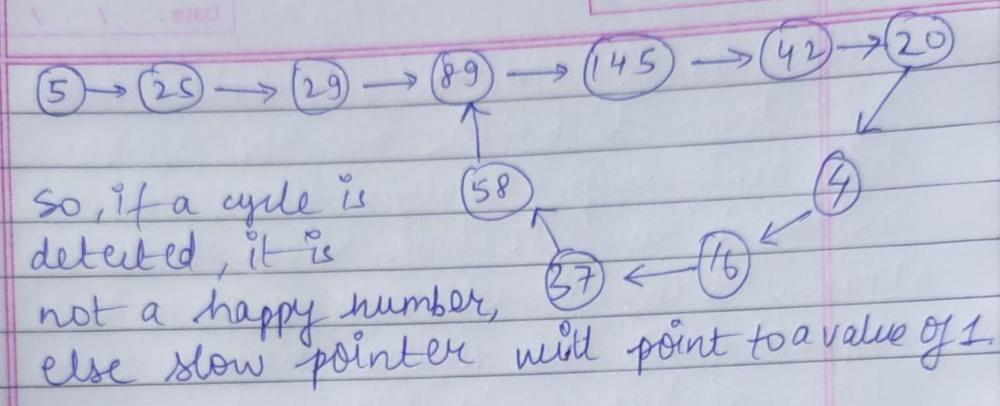
**Sol:**



Iterate the nums and get the index by doing nums[i] – 1 and then go to that index and mark it -ve. After coming out of the loop we can see that only index 4, 5 are left which value is not -ve and its position will be 5,6 respectively.

[**202. Happy Number**](https://leetcode.com/problems/happy-number/)





**268. Missing Number**

Given an array nums containing n distinct numbers in the range [0, n], return *the only number in the range that is missing from the array.*

**Input:** nums = [3,0,1]

**Output:** 2

**Explanation:** n = 3 since there are 3 numbers, so all numbers are in the range [0,3]. 2 is the missing number in the range since it does not appear in nums.

Sol:

XOR operation we should know

1. If we XOR something with 0, it will return the same number

Example: 5 ^ 0 = 5

1. If we XOR 2 same numbers then output will be 0

Example: 5 ^ 5 = 0

1. If we XOR 2 different numbers then it will result nothing

Example: 4 ^ 5 = 4 ^ 5

First we will XOR each number present in the nums array to itself

Then we will XOR it with every number present in the range [0, n]

So in this way every number will appear twice except missing number. So number which appears twice will lead to 0 and only thing will be remaining is missing number