

Problem 2295: Replace Elements in an Array

Problem Information

Difficulty: Medium

Acceptance Rate: 59.37%

Paid Only: No

Tags: Array, Hash Table, Simulation

Problem Description

You are given a **0-indexed** array `nums` that consists of `n` **distinct** positive integers. Apply `m` operations to this array, where in the `i`th operation you replace the number `operations[i][0]` with `operations[i][1]`.

It is guaranteed that in the `i`th operation:

`operations[i][0]` **exists** in `nums`. `operations[i][1]` does **not** exist in `nums`.

Return `the array obtained after applying all the operations`.

Example 1:

Input: `nums = [1,2,4,6]`, `operations = [[1,3],[4,7],[6,1]]` **Output:** `[3,2,7,1]` **Explanation:** We perform the following operations on `nums`: - Replace the number 1 with 3. `nums` becomes `[3,2,4,6]`. - Replace the number 4 with 7. `nums` becomes `[3,2,7,6]`. - Replace the number 6 with 1. `nums` becomes `[3,2,7,1]`. We return the final array `[3,2,7,1]`.

Example 2:

Input: `nums = [1,2]`, `operations = [[1,3],[2,1],[3,2]]` **Output:** `[2,1]` **Explanation:** We perform the following operations to `nums`: - Replace the number 1 with 3. `nums` becomes `[3,2]`. - Replace the number 2 with 1. `nums` becomes `[3,1]`. - Replace the number 3 with 2. `nums` becomes `[2,1]`. We return the array `[2,1]`.

Constraints:

* `n == nums.length` * `m == operations.length` * `1 <= n, m <= 105` * All the values of `nums` are **distinct**. * `operations[i].length == 2` * `1 <= nums[i], operations[i][0], operations[i][1] <= 106` * `operations[i][0]` will exist in `nums` when applying the `ith` operation. * `operations[i][1]` will not exist in `nums` when applying the `ith` operation.

Code Snippets

C++:

```
class Solution {
public:
    vector<int> arrayChange(vector<int>& nums, vector<vector<int>>& operations) {

    }
};
```

Java:

```
class Solution {
    public int[] arrayChange(int[] nums, int[][] operations) {

    }
}
```

Python3:

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