

1920. Build Array from Permutation

Description

Given a **zero-based permutation** `nums` (**0-indexed**), build an array `ans` of the **same length** where `ans[i] = nums[nums[i]]` for each `0 <= i < nums.length` and return it.

A **zero-based permutation** `nums` is an array of **distinct** integers from `0` to `nums.length - 1` (**inclusive**).

Example 1:

Input: `nums = [0,2,1,5,3,4]`

Output: `[0,1,2,4,5,3]`

Explanation: The array `ans` is built as follows:

```
ans = [nums[nums[0]], nums[nums[1]], nums[nums[2]], nums[nums[3]], nums[nums[4]], nums[nums[5]]]
      = [nums[0], nums[2], nums[1], nums[5], nums[3], nums[4]]
      = [0,1,2,4,5,3]
```

Example 2:

Input: `nums = [5,0,1,2,3,4]`

Output: `[4,5,0,1,2,3]`

Explanation: The array `ans` is built as follows:

```
ans = [nums[nums[0]], nums[nums[1]], nums[nums[2]], nums[nums[3]], nums[nums[4]], nums[nums[5]]]
      = [nums[5], nums[0], nums[1], nums[2], nums[3], nums[4]]
      = [4,5,0,1,2,3]
```

Constraints:

- `1 <= nums.length <= 1000`
- `0 <= nums[i] < nums.length`
- The elements in `nums` are **distinct**.

Follow-up: Can you solve it without using an extra space (i.e., `O(1)` memory)?

