565. Array Nesting

Description

You are given an integer array `nums` of length `n` where `nums` is a permutation of the numbers in the range `[0, n - 1]`.

You should build a set `s[k] = {nums[k], nums[nums[k]], nums[nums[nums[k]]], ... }` subjected to the following rule:

- The first element in `s[k]` starts with the selection of the element `nums[k]` of `index = k`.
- The next element in `s[k]` should be `nums[nums[k]]`, and then `nums[nums[nums[k]]]`, and so on.
- We stop adding right before a duplicate element occurs in `s[k]`.

Return *the longest length of a set* `s[k]`.

Example 1:

```
Input: nums = [5,4,0,3,1,6,2]
Output: 4
Explanation:
nums[0] = 5, nums[1] = 4, nums[2] = 0, nums[3] = 3, nums[4] = 1, nums[5] = 6, nums[6] = 2.
One of the longest sets s[k]:
s[0] = {nums[0], nums[5], nums[6], nums[2]} = {5, 6, 2, 0}
```

Example 2:

```
Input: nums = [0,1,2]
Output: 1
```

Constraints:

- `1 <= nums.length <= 10^5`
- `0 <= nums[i] < nums.length`
- All the values of `nums` are **unique**.