## 128. Longest Consecutive Sequence

Given an unsorted array of integers nums, return the length of the longest consecutive elements sequence.

You must write an algorithm that runs in O(n) time.

## Example 1:

```
Input: nums = [100,4,200,1,3,2]
Output: 4
Explanation: The longest consecutive elements sequence is [1, 2, 3, 4]. Therefore its length is 4.
```

## Example 2:

```
Input: nums = [0,3,7,2,5,8,4,6,0,1]
Output: 9
```

## Constraints:

- 0 <= nums.length <= 10<sup>5</sup>
- $-10^9 \le nums[i] \le 10^9$