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

class Solution {

public int longestConsecutive(int[] nums) {

int n = nums.length;

if (n == 0)

return 0;

int longest = 1;

Set<Integer> set = new HashSet<>();

// put all the array elements into set

for (int i = 0; i < n; i++) {

set.add(nums[i]);

}

// Find the longest sequence

for (int i : set) {

if (!set.contains(i - 1)) {//check if 'i' is a starting number

// find consecutive numbers

int cnt = 1;

int tempIndex = i;

while (set.contains(tempIndex + 1)) {

tempIndex++;

cnt++;

}

longest = Math.max(longest, cnt);

}

}

return longest;

}

}