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) {

        if(nums.length==1){

            return 1;

        }

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

        for(int i =0; i<nums.length; i++){

            HM.add(nums[i]);

        }

        int length= 0;

         int currentSequence =0;

         int lowValue=0;

         int upValue=0;

        for(int j =0; j<nums.length; j++){

            int k =nums[j];

            if(HM.remove(k)){

                 lowValue=k-1;

                 upValue=k+1;

                currentSequence+=1;

            }

            while(HM.remove(lowValue)){

                lowValue-=1;

                currentSequence+=1;

            }

            while(HM.remove(upValue)){

                currentSequence+=1;

                upValue+=1;

            }

            length = Math.max(length, currentSequence);

            currentSequence=0;

        }

        return length;

    }

}