128. Longest Consecutive Sequence

Hard 1438 64 Favorite Share

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

Your algorithm should run in O(*n*) complexity.

Example:

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

Accepted 178,758 | Submissions 444,795

Seen this question in a real interview before? Yes No

Contributor

Companies

Related Topics

Similar Questions

```java
package Algorithm;
import java.util.HashSet;
/*
 * 解题思路，将起先全部添加到hashset里面，为的就是去除重复数字，另外在便利一遍，往下取去除，往上取去除，维持一个最大数量值
 */
public class L128 {
    public int longestConsecutive(int[] nums) {
        if(nums == null || nums.length == 0)
            return 0;

        HashSet<Integer> hashSet = new HashSet<Integer>();
        for(int i = 0; i < nums.length; i ++) {
            hashSet.add(nums[i]);
        }

        int max = 0;
        for(int i = 0; i < nums.length; i ++) {
            if(hashSet.contains(nums[i])) {
                int count = 1;
                hashSet.remove(nums[i]);
                int low = nums[i] -1;
                while (hashSet.contains(low)) {
                    hashSet.remove(low);
                    low--;
                    count++;
                }
                int high = nums[i] + 1;
                while(hashSet.contains(high)) {
                    hashSet.remove(high);
                    high++;
                    count++;
                }
                max = Math.max(max, count);
            }
        }
        return max;
    }
}

```