

128. Longest Consecutive Sequence ★

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Total Accepted: **75512** Total Submissions: **223721** Difficulty: **Hard**

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

For example,

Given `[100, 4, 200, 1, 3, 2]`,

The longest consecutive elements sequence is `[1, 2, 3, 4]`. Return its length: `4`.

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

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C++



```
1 class Solution {
2 public:
3     int longestConsecutive(vector<int>& nums) {
4         unordered_map<int, bool> hash;
5         int maxConsecutiveNum = 0;
6         for (auto& it : nums) {
7             hash.insert(pair<int, bool>(it, false));
8         }
9         for (auto& it : hash) {
10             if (!it.second) {
11                 int startKey = it.first, consecutiveNum = 1, nowKeyPtr = startKey;
12                 it.second = true;
13                 auto hashIter = hash.find(--nowKeyPtr);
14                 while (hashIter != hash.end()) {
15                     hashIter->second = true;
16                     ++consecutiveNum;
17                     hashIter = hash.find(--nowKeyPtr);
18                 }
19                 nowKeyPtr = startKey;
20                 hashIter = hash.find(++nowKeyPtr);
21                 while (hashIter != hash.end()) {

```

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Notes

```
22         hashIter->second = true;
23         ++consecutiveNum;
24         hashIter = hash.find(++nowKeyPtr);
25     }
26
27     if (consecutiveNum > maxConsecutiveNum) {
28         maxConsecutiveNum = consecutiveNum;
29     }
30 }
31 }
32 return maxConsecutiveNum;
33 }
```

Notes

Custom Testcase ☐

Run Code

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