128.Longest Consecutive Sequence

Medium

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<sup>9</sup> <= nums[i] <= 10<sup>9</sup>`
- ```
  class Solution:
      def longestConsecutive(self, arr: List[int]) -> int:
          freqMap = {}
          for ele in arr:
              freqMap[ele] = True
          for key in freqMap.keys():
              if key - 1 in freqMap:
                  freqMap[key] = False

          maxLength = 0
          for key in freqMap.keys():
              if freqMap[key] is True:
                  temp = 1
                  while key + temp in freqMap:
                      temp = temp + 1
  ```
  ```

```
                maxLength = max(temp, maxLength)
        return maxLength
```