659. Split Array into Consecutive Subsequences

Description HintsSubmissionsDiscussSolution

DiscussPick One

You are given an integer array sorted in ascending order (may contain duplicates), you need to split them into several subsequences, where each subsequences consist of at least 3 consecutive integers. Return whether you can make such a split.

Example 1:

```
Input: [1,2,3,3,4,5]

Output: True

Explanation:

You can split them into two consecutive subsequences :

1, 2, 3

3, 4, 5
```

Example 2:

```
Input: [1,2,3,3,4,4,5,5]

Output: True

Explanation:

You can split them into two consecutive subsequences :

1, 2, 3, 4, 5

3, 4, 5
```

Example 3:

```
Input: [1,2,3,4,4,5]

Output: False
```

Python3

```
import heapq;
class Solution:
    def isPossible(self, nums):
        """
        :type nums: List[int]
        :rtype: bool
        """
        mp = {};
        for v in nums:
            if v-1 not in mp:
                if v not in mp:
                    mp[v]=[1];
                else:
                    heapq.heappush(mp[v],1);
            else:
                length = heapq.heappop(mp[v-1])+1;
                if len(mp[v-1])==0:
                    del mp[v-1];
                if v not in mp:
                    mp[v] = [];
                heapq.heappush(mp[v],length);
        for v,arr in mp.items():
            if len(arr)>0 and min(arr)<3:
                return False;
        return True;
```