## Length of the largest subarray with contiguous elements

Given an array of integers, find length of the longest subarray which contains numbers that can be arranged in a continuous sequence.

In the <u>previous post</u>, we have discussed a solution that assumes that elements in given array are distinct. Here we discuss a solution that works even if the input array has duplicates.

Examples:

```
Input: arr[] = {10, 12, 11};
Output: Length of the longest contiguous subarray is 3
Input: arr[] = {10, 12, 12, 10, 10, 11, 10};
Output: Length of the longest contiguous subarray is 2
```

```
def largestContiguousArray(arr):
   ans = 0
   myset = set()
   n = len(arr)
    for i in range (n - 1):
       maxEl = arr[i]
       minEl = arr[i]
        myset.add(arr[i])
        for j in range(i+1, n):
            if arr[j] in myset:
                break
            else:
                myset.add(arr[j])
                maxEl = max(maxEl, arr[j])
                minEl = min(minEl, arr[j])
                if maxEl - minEl == j - i:
                    ans = \max(\text{ans}, j - i + 1)
    return ans
arr = [10, 12, 12, 10, 10, 11, 10]
print(largestContiguousArray(arr))
```