

Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 public class Program {
4     // O(n) time | O(1) space - where n is the length of the input array
5     public static int LongestPeak(int[] array) {
6         int longestPeakLength = 0;
7         int i = 1;
8         while (i < array.Length - 1) {
9             bool isPeak = array[i - 1] < array[i] && array[i] > array[i + 1];
10            if (!isPeak) {
11                i += 1;
12                continue;
13            }
14
15            int leftIdx = i - 2;
16            while (leftIdx >= 0 && array[leftIdx] < array[leftIdx + 1]) {
17                leftIdx -= 1;
18            }
19
20            int rightIdx = i + 2;
21            while (rightIdx < array.Length && array[rightIdx] < array[rightIdx - 1]) {
22                rightIdx += 1;
23            }
24            int currentPeakLength = rightIdx - leftIdx - 1;
25            if (currentPeakLength > longestPeakLength) {
26                longestPeakLength = currentPeakLength;
27            }
28            i = rightIdx;
29        }
30        return longestPeakLength;
31    }
32 }
33
```

Solution 1

Solution 2

Solution 3

```
1 public class Program {
2     public static int LongestPeak(int[] array) {
3         // Write your code here.
4         return -1;
5     }
6 }
7
```

Run or submit code when you're ready.
