AlgoExpert

Quad Layout

Swift

14рх

Sublime

Monokai

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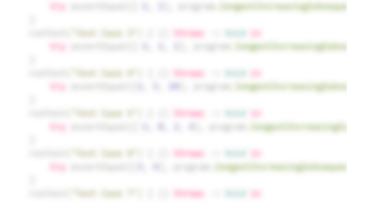
Our Solution(s) Run

```
Run Code
```

Your Solutions

Run Code

```
Solution 1 Solution 2
 1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
 3
   class Program {
       // O(nlogn) time | O(n) space
4
        func longestIncreasingSubsequence(_ array: [Int]) -> [Int] {
           var length = 0
           var indices: [Int?] = Array(repeating: nil, count: array.coun
           var sequences: [Int?] = Array(repeating: nil, count: array.co
9
10
           for i in 0 ... array.count {
11
               var startIndex = 1
12
               var endIndex = length
13
                let number = array[i]
               let newLength = binarySearch(&startIndex, &endIndex, indic
14
                indices[newLength] = i
16
17
                sequences[i] = indices[newLength - 1]
                length = max(length, newLength)
18
19
20
           return buildSequence(array, sequences, &indices[length])
21
22
24
        func binarySearch(_ startIndex: inout Int, _ endIndex: inout Int,
25
           if startIndex > endIndex {
26
               return startIndex
27
28
29
           var middleIndex = Double(startIndex + endIndex) / 2
30
           middleIndex = middleIndex.rounded(.down)
31
           let intMiddle = Int(middleIndex)
33
           if let index = indices[intMiddle] {
```



Run or submit code when you're ready.