

Our Solution(s)

Run Code

Your Solutions

Run Code

Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 class Program {
4     // O(n^2) time | O(1) space
5     func diskStacking(disks: inout [[Int]]) -> [[Int]] {
6         disks.sort(by: { $0[2] < $1[2] })
7
8         var heights = disks.map { $0[2] }
9         var previousIndices = Array(repeating: -1, count: disks.count)
10        var maximumHeightIndex = 0
11
12        for i in 1 ..< disks.count {
13            let currentDisk = disks[i]
14
15            for j in 0 ..< i {
16                let previousDisk = disks[j]
17
18                if areValidDimensions(previousDisk, currentDisk) {
19                    if heights[i] <= heights[j] + currentDisk[2] {
20                        heights[i] = heights[j] + currentDisk[2]
21                        previousIndices[i] = j
22                    }
23                }
24            }
25
26            if heights[i] >= heights[maximumHeightIndex] {
27                maximumHeightIndex = i
28            }
29        }
30
31        return buildSequence(disks, previousIndices, &maximumHeightIndex)
32    }
33}
```

Solution 1

Solution 2

Solution 3

```
1 class Program {
2     func diskStacking(disks: inout [[Int]]) -> [[Int]] {
3         // Write your code here.
4         return []
5     }
6 }
7
```

Our Tests

Custom Output

Submit Code

```
1 class Program {
2     func diskStacking(disks: inout [[Int]]) -> [[Int]] {
3         // Write your code here.
4         return []
5     }
6 }
7
```

```
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2
3 class Program {
4     // O(n^2) time | O(1) space
5     func diskStacking(disks: inout [[Int]]) -> [[Int]] {
6         disks.sort(by: { $0[2] < $1[2] })
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8         var heights = disks.map { $0[2] }
9         var previousIndices = Array(repeating: -1, count: disks.count)
10        var maximumHeightIndex = 0
11
12        for i in 1 ..< disks.count {
13            let currentDisk = disks[i]
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15            for j in 0 ..< i {
16                let previousDisk = disks[j]
17
18                if areValidDimensions(previousDisk, currentDisk) {
19                    if heights[i] <= heights[j] + currentDisk[2] {
20                        heights[i] = heights[j] + currentDisk[2]
21                        previousIndices[i] = j
22                    }
23                }
24            }
25
26            if heights[i] >= heights[maximumHeightIndex] {
27                maximumHeightIndex = i
28            }
29        }
30
31        return buildSequence(disks, previousIndices, &maximumHeightIndex)
32    }
33}
```

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Run or submit code when you're ready.