

Our Solution(s)

Run Code

Your Solutions

Run Code

Solution 1

```
1 # Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 # O(n^2) time | O(n) space
4 def diskStacking(disks):
5     disks.sort(key=lambda disk: disk[2])
6     heights = [disk[2] for disk in disks]
7     sequences = [None for disk in disks]
8     maxHeightIdx = 0
9     for i in range(1, len(disks)):
10         currentDisk = disks[i]
11         for j in range(0, i):
12             otherDisk = disks[j]
13             if areValidDimensions(otherDisk, currentDisk):
14                 if heights[i] <= currentDisk[2] + heights[j]:
15                     heights[i] = currentDisk[2] + heights[j]
16                     sequences[i] = j
17             if heights[i] >= heights[maxHeightIdx]:
18                 maxHeightIdx = i
19     return buildSequence(disks, sequences, maxHeightIdx)
20
21
22 def areValidDimensions(o, c):
23     return o[0] < c[0] and o[1] < c[1] and o[2] < c[2]
24
25
26 def buildSequence(array, sequences, currentIdx):
27     sequence = []
28     while currentIdx is not None:
29         sequence.append(array[currentIdx])
30         currentIdx = sequences[currentIdx]
31     return list(reversed(sequence))
32
```

Solution 1   Solution 2   Solution 3

```
1 def diskStacking(disks):
2     # Write your code here.
3     pass
4
```

Our Tests

Custom Output

Submit Code



