

Our Solution(s)

Run Code

Your Solutions

Run Code

Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 #include <vector>
4 #include <climits>
5 using namespace std;
6
7 vector<vector<int>> buildSequence(vector<int> array, vector<int> sequence,
8                                 int currentIdx, int sum) {
9
10 // O(n^2) time | O(n) space
11 vector<vector<int>> maxSumIncreasingSubsequence(vector<int> array) {
12     vector<int> sequences(array.size(), INT_MIN);
13     vector<int> sums = array;
14     int maxSumIdx = 0;
15     for (int i = 0; i < array.size(); i++) {
16         int currentNum = array[i];
17         for (int j = 0; j < i; j++) {
18             int otherNum = array[j];
19             if (otherNum < currentNum && sums[j] + currentNum >= sums[i]) {
20                 sums[i] = sums[j] + currentNum;
21                 sequences[i] = j;
22             }
23         }
24         if (sums[i] >= sums[maxSumIdx]) {
25             maxSumIdx = i;
26         }
27     }
28     return buildSequence(array, sequences, maxSumIdx, sums[maxSumIdx]);
29 }
30
31 vector<vector<int>> buildSequence(vector<int> array, vector<int> sequence,
32                                 int currentIdx, int sum) {
33     vector<vector<int>> sequence = {{}, {}};
```

Solution 1

Solution 2

Solution 3

```
1 #include <vector>
2 using namespace std;
3
4 vector<vector<int>> maxSumIncreasingSubsequence(vector<int> array) {
5     // Write your code here.
6     return {};
7 }
8
```

Our Tests

Custom Output

Submit Code

```
1  vector<int> vector1(20, 10, 10, 10, 10, 10);
2
3
4  vector<vector<int>> vector2(10, 10, 10, 10, 10, 10, 10, 10, 10, 10);
5
6  vector<vector<int>> vector3(10, 10, 10);
7  vector<vector<int>> vector4(10, 10, 10);
8  vector<vector<int>> vector5(10, 10, 10);
9  vector<vector<int>> vector6(10, 10, 10);
10 vector<vector<int>> vector7(10, 10, 10, 10, 10);
11 vector<vector<int>> vector8(10, 10, 10, 10, 10);
12 vector<vector<int>> vector9(10, 10, 10, 10, 10);
13 vector<vector<int>> vector10(10, 10, 10, 10, 10);
14 vector<vector<int>> vector11(10, 10, 10, 10, 10, 10, 10, 10, 10, 10);
15
16 // class Program {
17 //     public static void Main()
18 //     {
19 //     }
```

Run or submit code when you're ready.