AlgoExpert Quad Layout Go 12px Sublime Monok

Prompt Scratchpad Our Solution(s) Video Explanation Run Code

```
Solution 1 Solution 2 Solution 3
```

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```
// Copyright © 2020 AlgoExpert, LLC. All rights reserved.
 2
 3
     package main
 4
 5
     // O(n) time \mid O(n) space - where n is the length of the array
 6 ▼ func MinHeightBST(array []int) *BST {
 7
       return constructMinHeightBst(array, 0, len(array)-1)
 8
9
10 ▼ func constructMinHeightBst(array []int, startIdx, endIdx int) *BST {
11 ▼ if endIdx < startIdx {
12
        return nil
13
       }
14
      midIdx := (startIdx + endIdx) / 2
      bst := &BST{Value: array[midIdx]}
15
16
       bst.Left = constructMinHeightBst(array, startIdx, midIdx-1)
       bst.Right = constructMinHeightBst(array, midIdx+1, endIdx)
17
       return bst
18
19
20
21 ▼ type BST struct {
      Value int
22
23
24
       Left *BST
25
       Right *BST
    }
26
27
    // We don't use this method for this solution.
29 ▼ func (tree *BST) Insert(value int) *BST {
30 ▼ if value < tree.Value {
31 ▼
        if tree.Left == nil {
32
           tree.Left = &BST{Value: value}
33 ▼
        } else {
          tree.Left.Insert(value)
34
35
36 ▼ } else {
        if tree.Right == nil {
37 ▼
          tree.Right = &BST{Value: value}
38
         } else {
39 ▼
40
           tree.Right.Insert(value)
41
42
43
       return tree
44
```