

Prompt	Scratchpad	Our Solution(s)	Video Explanation	Run Code
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Solution 1	Solution 2	Solution 3
<pre>1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved. 2 3 package main 4 5 // O(nlog(n)) time O(n) space - where n is the length of the array 6 ▾ func MinHeightBST(array []int) *BST { 7 return constructMinHeightBst(array, nil, 0, len(array)-1) 8 } 9 10 ▾ func constructMinHeightBst(array []int, bst *BST, startIdx, endIdx int) *BST { 11 ▾ if endIdx < startIdx { 12 return nil 13 } 14 midIdx := (startIdx + endIdx) / 2 15 valueToAdd := array[midIdx] 16 ▾ if bst == nil { 17 bst = &BST{Value: valueToAdd} 18 ▾ } else { 19 bst.Insert(valueToAdd) 20 } 21 constructMinHeightBst(array, bst, startIdx, midIdx-1) 22 constructMinHeightBst(array, bst, midIdx+1, endIdx) 23 return bst 24 } 25 26 ▾ type BST struct { 27 Value int 28 29 Left *BST 30 Right *BST 31 } 32 33 ▾ func (tree *BST) Insert(value int) *BST { 34 ▾ if value < tree.Value { 35 ▾ if tree.Left == nil { 36 tree.Left = &BST{Value: value} 37 ▾ } else { 38 tree.Left.Insert(value) 39 } 40 ▾ } else { 41 ▾ if tree.Right == nil { 42 tree.Right = &BST{Value: value} 43 ▾ } else { 44 tree.Right.Insert(value) 45 } 46 } 47 return tree 48 } 49</pre>		

