

Prompt	Scratchpad	Our Solution(s)	Video Explanation	Run Code
--------	------------	-----------------	-------------------	----------

Solution 1	Solution 2	Solution 3
<pre>1 # Copyright © 2020 AlgoExpert, LLC. All rights reserved. 2 3 # O(n) time O(n) space - where n is the length of the array 4 ▾ def minHeightBst(array): 5 return constructMinHeightBst(array, None, 0, len(array) - 1) 6 7 8 ▾ def constructMinHeightBst(array, bst, startIdx, endIdx): 9 ▾ if endIdx < startIdx: 10 return 11 midIdx = (startIdx + endIdx) // 2 12 newBstNode = BST(array[midIdx]) 13 ▾ if bst is None: 14 bst = newBstNode 15 ▾ else: 16 ▾ if array[midIdx] < bst.value: 17 bst.left = newBstNode 18 bst = bst.left 19 ▾ else: 20 bst.right = newBstNode 21 bst = bst.right 22 constructMinHeightBst(array, bst, startIdx, midIdx - 1) 23 constructMinHeightBst(array, bst, midIdx + 1, endIdx) 24 return bst 25 26 27 ▾ class BST: 28 ▾ def __init__(self, value): 29 self.value = value 30 self.left = None 31 self.right = None 32 33 # We don't use this method for this solution. 34 ▾ def insert(self, value): 35 ▾ if value < self.value: 36 ▾ if self.left is None: 37 self.left = BST(value) 38 ▾ else: 39 self.left.insert(value) 40 ▾ else: 41 ▾ if self.right is None: 42 self.right = BST(value) 43 ▾ else: 44 self.right.insert(value) 45</pre>		

