

PromptScratchpadOur Solution(s)Video ExplanationRun Code

Solution 1Solution 2Solution 3

```
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, 0, len(array) - 1)
6
7
8  ▾ def constructMinHeightBst(array, startIdx, endIdx):
9      ▾ if endIdx < startIdx:
10         return None
11         midIdx = (startIdx + endIdx) // 2
12         bst = BST(array[midIdx])
13         bst.left = constructMinHeightBst(array, startIdx, midIdx - 1)
14         bst.right = constructMinHeightBst(array, midIdx + 1, endIdx)
15         return bst
16
17
18  ▾ class BST:
19      ▾ def __init__(self, value):
20         self.value = value
21         self.left = None
22         self.right = None
23
24         # We don't use this method for this solution.
25      ▾ def insert(self, value):
26          ▾ if value < self.value:
27              ▾ if self.left is None:
28                 self.left = BST(value)
29              ▾ else:
30                 self.left.insert(value)
31          ▾ else:
32              ▾ if self.right is None:
33                 self.right = BST(value)
34              ▾ else:
35                 self.right.insert(value)
36
```

