AlgoExpert Quad Layout JavaScript 12px Sublime Monok

Prompt Scratchpad Our Solution(s) Video Explanation Run Code

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

```
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 1
 2
     // O(n) time | O(n) space - where n is the length of the array
   ▼ function minHeightBst(array) {
       return constructMinHeightBst(array, null, 0, array.length - 1);
 5
 6
 7
 8 ▼ function constructMinHeightBst(array, bst, startIdx, endIdx) {
       if (endIdx < startIdx) return;</pre>
 9
       const midIdx = Math.floor((startIdx + endIdx) / 2);
10
11
       const newBstNode = new BST(array[midIdx]);
12 ▼ if (bst === null) {
13
        bst = newBstNode;
14 ▼ } else {
       if (array[midIdx] < bst.value) {</pre>
16
          bst.left = newBstNode;
17
           bst = bst.left;
        } else {
18 ▼
           bst.right = newBstNode;
19
20
           bst = bst.right;
21
22
       constructMinHeightBst(array, bst, startIdx, midIdx - 1);
23
24
       constructMinHeightBst(array, bst, midIdx + 1, endIdx);
25
       return bst;
    }
26
27
28 ▼ class BST {
29 ▼ constructor(value) {
         this.value = value;
30
31
         this.left = null;
32
         this.right = null;
33
34
       // We don't use this method for this solution.
35
36 ▼
       insert(value) {
         if (value < this.value) {</pre>
37 ▼
           if (this.left === null) {
38 ▼
             this.left = new BST(value);
39
           } else {
41
             this.left.insert(value);
42
         } else {
43 ▼
           if (this.right === null) {
             this.right = new BST(value);
45
46 ▼
           } else {
             this.right.insert(value);
47
48
49
50
51
52
     exports.minHeightBst = minHeightBst;
53
54
```