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
 3
     // O(nlog(n)) time \mid 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) {
 9
       if (endIdx < startIdx) return;</pre>
       const midIdx = Math.floor((startIdx + endIdx) / 2);
10
       const valueToAdd = array[midIdx];
11
12 ▼
      if (bst === null) {
        bst = new BST(valueToAdd);
13
14 ▼ } else {
        bst.insert(valueToAdd);
15
16
       }
       constructMinHeightBst(array, bst, startIdx, midIdx - 1);
17
       constructMinHeightBst(array, bst, midIdx + 1, endIdx);
18
       return bst;
19
20
21
22 ▼ class BST {
23 ▼ constructor(value) {
24
         this.value = value;
         this.left = null;
25
         this.right = null;
26
27
28
29 ▼
      insert(value) {
        if (value < this.value) {</pre>
30 ▼
31 ▼
           if (this.left === null) {
32
             this.left = new BST(value);
33 ▼
           } else {
34
             this.left.insert(value);
35
36 ▼
         } else {
           if (this.right === null) {
37 ▼
             this.right = new BST(value);
38
39 ▼
           } else {
40
             this.right.insert(value);
41
42
43
44
45
     exports.minHeightBst = minHeightBst;
46
47
```