

Our Solution(s)

Run Code

Your Solutions

Run Code

Solution 1

Solution 2

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 // O(n^2) time | O(d) space - where n is the number of
4 // nodes in each array, respectively, and d is the depth
5 // of the BST that they represent
6 function sameBsts(arrayOne, arrayTwo) {
7   return areSameBsts(arrayOne, arrayTwo, 0, 0, -Infinity, Infinity);
8 }
9
10 function areSameBsts(arrayOne, arrayTwo, rootIdxOne, rootIdxTwo, minVal, maxVal) {
11   if (rootIdxOne === -1 || rootIdxTwo === -1) return rootIdxOne === rootIdxTwo;
12
13   if (arrayOne[rootIdxOne] !== arrayTwo[rootIdxTwo]) return false;
14
15   const leftRootIdxOne = getIdxOfFirstSmaller(arrayOne, rootIdxOne, minVal);
16   const leftRootIdxTwo = getIdxOfFirstSmaller(arrayTwo, rootIdxTwo, minVal);
17   const rightRootIdxOne = getIdxOfFirstBiggerOrEqual(arrayOne, rootIdxOne, maxVal);
18   const rightRootIdxTwo = getIdxOfFirstBiggerOrEqual(arrayTwo, rootIdxTwo, maxVal);
19
20   const currentValue = arrayOne[rootIdxOne];
21   const leftAreSame = areSameBsts(arrayOne, arrayTwo, leftRootIdxOne, leftRootIdxTwo, minVal, currentValue);
22   const rightAreSame = areSameBsts(arrayOne, arrayTwo, rightRootIdxOne, rightRootIdxTwo, currentValue, maxVal);
23
24   return leftAreSame && rightAreSame;
25 }
26
27 function getIdxOfFirstSmaller(array, startingIdx, minVal) {
28   // Find the index of the first smaller value after the startingIdx.
29   // Make sure that this value is greater than or equal to the minVal,
30   // which is the value of the previous parent node in the BST. If it
31   // isn't, then that value is located in the left subtree of the
32   // previous parent node.
33   for (let i = startingIdx + 1; i < array.length; i++) {
```

Solution 1

Solution 2

Solution 3

```
1 function sameBsts(arrayOne, arrayTwo) {
2   // Write your code here.
3 }
4
5 // Do not edit the line below.
6 exports.sameBsts = sameBsts;
7
```

Our Tests

Custom Output

Submit Code

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 // O(n^2) time | O(d) space - where n is the number of
4 // nodes in each array, respectively, and d is the depth
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10 function areSameBsts(arrayOne, arrayTwo, rootIdxOne, rootIdxTwo, minVal, maxVal) {
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13   if (arrayOne[rootIdxOne] !== arrayTwo[rootIdxTwo]) return false;
14
15   const leftRootIdxOne = getIdxOfFirstSmaller(arrayOne, rootIdxOne, minVal);
16   const leftRootIdxTwo = getIdxOfFirstSmaller(arrayTwo, rootIdxTwo, minVal);
17   const rightRootIdxOne = getIdxOfFirstBiggerOrEqual(arrayOne, rootIdxOne, maxVal);
18   const rightRootIdxTwo = getIdxOfFirstBiggerOrEqual(arrayTwo, rootIdxTwo, maxVal);
19
20   const currentValue = arrayOne[rootIdxOne];
21   const leftAreSame = areSameBsts(arrayOne, arrayTwo, leftRootIdxOne, leftRootIdxTwo, minVal, currentValue);
22   const rightAreSame = areSameBsts(arrayOne, arrayTwo, rightRootIdxOne, rightRootIdxTwo, currentValue, maxVal);
23
24   return leftAreSame && rightAreSame;
25 }
26
27 function getIdxOfFirstSmaller(array, startingIdx, minVal) {
28   // Find the index of the first smaller value after the startingIdx.
29   // Make sure that this value is greater than or equal to the minVal,
30   // which is the value of the previous parent node in the BST. If it
31   // isn't, then that value is located in the left subtree of the
32   // previous parent node.
33   for (let i = startingIdx + 1; i < array.length; i++) {
```

```
1 function sameBsts(arrayOne, arrayTwo) {
2   // Write your code here.
3 }
4
5 // Do not edit the line below.
6 exports.sameBsts = sameBsts;
7
```

```
10 #
11
12 def Test Case 407 : Pass/Fail (1/1)
13 input arr=[10] = [10, 10, 10, 10, 10, 10, 10]
14 input arr=[10] = [10, 10, 10, 10, 10, 10, 10]
15 ans expected=arr[0] actual=arr[0] arr input ans expected input
16
17
18 def Test Case 407 : Pass/Fail (1/1)
19 input arr=[10] = [100, 100, 10, 100, 100, 100, 10, 100]
20 input arr=[10] = [100, 10, 10, 100, 10, 100, 100, 100]
21 ans expected=arr[0] actual=arr[0] arr input ans expected input
22
23
24 def Test Case 407 : Pass/Fail (1/1)
```

Run or submit code when you're ready.