

## Problem Challenge 3

We'll cover the following

- Count of Structurally Unique Binary Search Trees (hard)
- Try it yourself

### Count of Structurally Unique Binary Search Trees (hard) #

Given a number 'n', write a function to return the count of structurally unique Binary Search Trees (BST) that can store values 1 to 'n'.

Example 1:


```
Input: 2
Output: 2
Explanation: As we saw in the previous problem, there are 2 unique BSTs storing numbers from 1-2.
```


Example 2:


```
Input: 3
Output: 5
Explanation: There will be 5 unique BSTs that can store numbers from 1 to 3.
```


### Try it yourself #

Try solving this question here:

 Java

 Python3

 JS


 C++

```
1 import java.util.*;
2
3 class TreeNode {
4     int val;
5     TreeNode left;
6     TreeNode right;
7
8     TreeNode(int x) {
9         val = x;
10    }
11 };
12
13 class CountUniqueTrees {
14     public int countTrees(int n) {
15         // TODO: Write your code here
16         return -1;
17     }
18
19     public static void main(String[] args) {
20         CountUniqueTrees ct = new CountUniqueTrees();
21         int count = ct.countTrees(3);
22         System.out.print("Total trees: " + count);
23     }
24 }
25
```

Run

Save

Reset






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