

Our Solution(s)

Run Code

Your Solutions

Run Code

Solution 1Solution 2Solution 3

```
1 # Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 # Upper Bound: O((n*(2n)!)/(n!(n+1)!)) time | O(n) space
4 def numberOfBinaryTreeTopologies(n):
5     if n == 0:
6         return 1
7     numberOfTrees = 0
8     for leftTreeSize in range(n):
9         rightTreeSize = n - 1 - leftTreeSize
10        numberOfLeftTrees = numberOfBinaryTreeTopologies(leftTreeSize)
11        numberOfRightTrees = numberOfBinaryTreeTopologies(rightTreeSize)
12        numberOfTrees += numberOfLeftTrees * numberOfRightTrees
13    return numberOfTrees
14
```

Solution 1Solution 2Solution 3

```
1 def numberOfBinaryTreeTopologies(n):
2     # Write your code here.
3     pass
4
```

```
10 # test, make, 20 test()
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```

Run or submit code when you're ready.