Our Solution(s) Run Code

Solution 1 Solution 2 Solution 3

```
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public class Program {
  // Upper Bound: O((n*(2n)!)/(n!(n+1)!)) time | O(n) space
  public static int NumberOfBinaryTreeTopologies(int n) {
    if (n == 0) {
      return 1;
    }
    int numberOfTrees = 0;
    for (int leftTreeSize = 0; leftTreeSize < n; leftTreeSize++) {
      int rightTreeSize = n - 1 - leftTreeSize;
      int numberOfLeftTrees = NumberOfBinaryTreeTopologies(leftTreeSiz
      int numberOfRightTrees = NumberOfBinaryTreeTopologies(rightTreeS
      numberOfTrees += numberOfLeftTrees * numberOfRightTrees;
    }
    return numberOfTrees;
  }
}

```

Your Solutions Run Code

Solution 1 Solution 2 Solution 3

```
public class Program {
  public static int NumberOfBinaryTreeTopologies(int n) {
    // Write your code here.
    return -1;
  }
}

```

Our Tests

Custom Output Submit Code

Run or submit code when you're ready.