Problem 96: Unique Binary Search Trees

Problem Information

Difficulty: Medium
Acceptance Rate: 62.97%
Paid Only: No
Tags: Math, Dynamic Programming, Tree, Binary Search Tree, Binary Tree

Problem Description

Given an integer `n`, return _the number of structurally unique**BST '**s (binary search trees) which has exactly _`n` _nodes of unique values from_ `1` _to_ `n`.

Example 1:

![](https://assets.leetcode.com/uploads/2021/01/18/uniquebstn3.jpg)

Input: n = 3 **Output:** 5

Example 2:

Input: n = 1 **Output:** 1

Constraints:

* `1 <= n <= 19`

Code Snippets

C++:

```
class Solution {
public:
int numTrees(int n) {

}
};
```

Java:

```
class Solution {
public int numTrees(int n) {

}
}
```

Python3:

```
class Solution:
def numTrees(self, n: int) -> int:
```