

```
class Solution {
    public int numTrees(int n) {
        if (n < 2) return 1;
        int[] dp = new int[n+1];
        dp[0] = 1; dp[1] = 1;
        for (int i = 2; i <= n; i++) {
            int sum = 0;
            for (int j = 0; j < i; j++) {
                sum += dp[j] * dp[i - j - 1];
            }
            dp[i] = sum;
        }
        return dp[n];
    }
}
```