

Problem 1137: N-th Tribonacci Number

Problem Information

Difficulty: Easy

Acceptance Rate: 63.40%

Paid Only: No

Tags: Math, Dynamic Programming, Memoization

Problem Description

The Tribonacci sequence T_n is defined as follows:

$T_0 = 0$, $T_1 = 1$, $T_2 = 1$, and $T_{n+3} = T_n + T_{n+1} + T_{n+2}$ for $n \geq 0$.

Given `n`, return the value of T_n .

Example 1:

Input: $n = 4$ **Output:** 4 **Explanation:** $T_3 = 0 + 1 + 1 = 2$ $T_4 = 1 + 1 + 2 = 4$

Example 2:

Input: $n = 25$ **Output:** 1389537

Constraints:

* `0 <= n <= 37` * The answer is guaranteed to fit within a 32-bit integer, ie. `answer <= 2^31 - 1`.

Code Snippets

C++:

```
class Solution {  
public:
```

```
int tribonacci(int n) {  
    }  
};
```

Java:

```
class Solution {  
public int tribonacci(int n) {  
    }  
}
```

Python3:

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