Tetranacci Number II

Problem

Submissions

Leaderboard

Discussions

The **Tetranacci sequence** is an extension of the well-known Fibonacci sequence, incorporating four previous terms instead of two.

The Tetranacci sequence T_n is defined as follows:

•
$$T_0 = 0$$
, $T_1 = 1$, $T_2 = 1$, $T_3 = 2$

• For
$$n \geq 4$$
 , $T_n = T_{n-1} + T_{n-2} + T_{n-3} + T_{n-4}$

Given an integer n, return the value of T_n

Note: You must solve this problem using Loop. (Bottom up)

Input Format

A single integer n representing the position in the Tetranacci sequence.

Constraints

- $0 \le n \le 60$
- The result is guaranteed to fit within a 64-bit integer (\leq 2⁶³-1)

Output Format

Print a single integer, the value of T_n

Sample Input 0

4

Sample Output 0

4

Explanation 0

$$T_4 = T_3 + T_2 + T_1 + T_0 = 2 + 1 + 1 + 0 = 4$$

Sample Input 1

5

Sample Output 1

Explanation 1

1 ##include <cmath>
2 #include <cstdio>
3 #include <vector>
4 #include <iostream>
5 #include <algorithm>
6 using namespace std;

9 vint main() {

return 0;

10 🔻

11 12 13

$$T_5 = T_4 + T_3 + T_2 + T_1 = 4 + 2 + 1 + 1 = 8$$

Difficulty: Medium
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Submissions: 264 Max Score: 20

Line: 1 Col: 1

<u>♣ Upload Code as File</u> Test against custom input

Run Code

Submit Code

 $/\star$ Enter your code here. Read input from STDIN. Print output to STDOUT $\star/$