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Started on	Tuesday, 29 October 2024, 1:44 PM
State	Finished
Completed on	Tuesday, 29 October 2024, 2:00 PM
Time taken	15 mins 54 secs
Grade	10.00 out of 10.00 (100%)

Question 1

Correct

Mark 10.00 out of 10.00

Playing with Numbers:

Ram and Sita are playing with numbers by giving puzzles to each other. Now it was Ram term, so he gave Sita a positive integer 'n' and two numbers 1 and 3. He asked her to find the possible ways by which the number n can be represented using 1 and 3. Write any efficient algorithm to find the possible ways.

Example 1:**Input:** 6**Output:** 6**Explanation:** There are 6 ways to 6 represent number with 1 and 3 $1+1+1+1+1+1$ $3+3$ $1+1+1+3$ $1+1+3+1$ $1+3+1+1$ $3+1+1+1$ **Input Format**

First Line contains the number n

Output Format**Print:** The number of possible ways 'n' can be represented using 1 and 3

Sample Input

6

Sample Output

6

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 #define NUM_N 100
3 int main(){
4     int m;
5     scanf("%d",&m);
6     long long dp[NUM_N + 1]={0};
7     dp[0]=1;
8     for(int i=1;i<=m;i++){
9
10         if(i>=1)dp[i] += dp[i-1];
11         if(i>=3) dp[i] += dp[i -3];
12
13     }
14     printf("%lld\n",dp[m]);
15     return 0;
16
17 }
```

	Input	Expected	Got	
✓	6	6	6	✓
✓	25	8641	8641	✓
✓	100	24382819596721629	24382819596721629	✓

Passed all tests! ✓

Correct

Marks for this submission: 10.00/10.00.

◀ 5-Implementation of Quick Sort

Jump to...

2-DP-Playing with chessboard ▶