Started on	Monday, 29 September 2025, 3:15 PM
State	Finished
Completed on	Monday, 29 September 2025, 3:34 PM
Time taken	18 mins 52 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 %)

```
#include<stdio.h>
long int number(long int n){
    long int r[n+1];
    r[0]=1;
    r[1]=1;
    r[2]=1;
    for(int i=3;i<=n;i++)
        r[i]=r[i-1]+r[i-3];
    return r[n];
}
int main(){
    long int n;
    scanf("%ld",&n);
    printf("%ld",number(n));
}
```

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

Passed all tests! ✔

Correct

Marks for this submission: 10.00/10.00.