

**Started on** Monday, 29 September 2025, 3:16 PM

**State** Finished

**Completed on** Monday, 29 September 2025, 3:34 PM

**Time taken** 18 mins 21 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 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 int main()
3 {
4     int n;
5     scanf("%d",&n);
6     long int r[n+1];
7     r[0]=1;
8     r[1]=1;
9     r[2]=1;
10    for(int i=3;i<=n;i++)
11    {
12        r[i]=r[i-1]+r[i-3];
13    }
14    printf("%ld",r[n]);
15 }
16 }
```

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

Passed all tests! ✓

Correct

Marks for this submission: 10.00/10.00.