- **EASY**

- **Max Score: 30 Points**

Unique Steps

You are on the ground floor and want to reach the top of a building. It has N steps. You can climb either 1 or 2 steps at a time.

Given a positive integer N, find the number of ways you can reach the top of the building.

Note Complete the given function. The input and output would be handled by the driver code.

Input Format

The first line contains an integer N.

Output Format

Print the answer in a new line.

Example 1

Input

2

Output

2

Explanation

You can climb two steps at time, or climb 1 step + 1 step.

Example 2

Input

3

Output

3

Explanation

You can climb in the following ways

1 + 1 + 1 = 3 steps

1 + 2 = 3 steps

2 + 1 = 3 steps

Constraints

1 <= N <= 45

My code

```
// in java
import java.io.*;
import java.util.*;
```

```java
public class Main {
    public static int stairs(int n){
            if(n==1)
                    return 1;
            if(n==2)
                    return 2;
            return (stairs(n-1)+stairs(n-2));
        // Your code here
    }
    public static void main(String args[]) {
        Scanner input = new Scanner(System.in);
        int n = input.nextInt();
        System.out.println(stairs(n));
    }
}
```