北京大学 PEKING UNIVERSITY
JUDGE ONLINE FOR ACM/ICPC

Online Judge	Problem Set	Authors	Online Contests	User
Web Board	Problems	Register	Current Contest	**rill7747** Log Out
Home Page	Submit Problem	Update your info	Past Contests	Mail:1(**0**)
F.A.Qs	Online Status	Authors ranklist	Scheduled Contests	Login Log Archive
Statistical Charts	Prob.ID: [____]	[____]	Award Contest	
	Go	Search		

Connected Graph

Time Limit: 1000MS   **Memory Limit:** 30000K

Total Submissions: 4019   **Accepted:** 1855

Language: Default ▾

Description

An undirected graph is a set V of vertices and a set of E∈{V*V} edges.An undirected graph is connected if and only if for every pair (u,v) of vertices,u is reachable from v.
You are to write a program that tries to calculate the number of different connected undirected graph with n vertices.
For example,there are 4 different connected undirected graphs with 3 vertices.
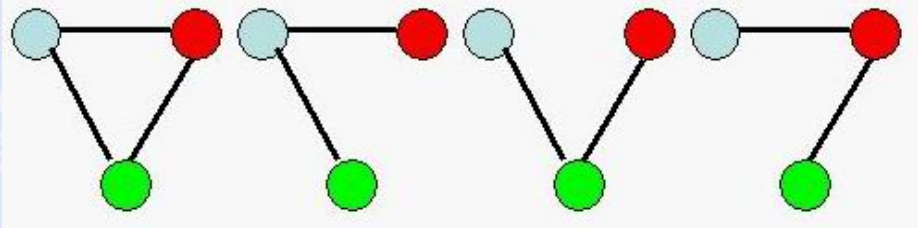
Input

The input contains several test cases. Each test case contains an integer n, denoting the number of vertices. You may assume that 1<=n<=50. The last test case is followed by one zero.

Output

For each test case output the answer on a single line.

Sample Input

```
1
2
3
4
0
```

Sample Output

```
1
1
```

4
38

Source

LouTiancheng@POJ

[Submit]   [Go Back]   [Status]   [Discuss]

Home Page   Go Back   To top