https://course.acciojob.com/idle?question=d61be5f2-dc63-49bc-bf18-b290d3d114b0

- EASY
- Max Score: 30 Points

AB Series

Arjun has made a special series and named it as AB Series. The series follows the trend

```
Tn = { (Tn-2)*(Tn-2) - (Tn-1) }
```

In this AB series, the first and the second terms are `0` and `1` respectively. Help Arjun to find the Nth term of the series.

Input Format

Enter an integer `N`

Output Format

Print the `Nth` element of the series

Example 1

Input

```
6
```

Output

```
5
```

Explanation

```
First-term is given as 0 and the second term is 1.
So the T3 = (T3-2)*(T3-2) - (T3-1) = T1*T1 - T2 = 0*0 - 1 = -1
Similarly, performing the above operations repeatedly for N times
```

```
Fourth term = 1*1 - (-1) = 2
Fifth term = (-1)*(-1) - 2 = 1 - 2 = -1
Sixth term = 2*2 - (-1) = 4 + 1 = 5
```

Example 2

Input

```
8
```

Output

```
29
```

Explanation

```
First-term is given as 0 and the second term is 1.
So the T3 = (T3-2)*(T3-2) - (T3-1) = T1*T1 - T2 = 0*0 - 1 = -1
Similarly, performing the above operations repeatedly for N times
Fourth term = 1*1 - (-1) = 2
Fifth term = (-1)*(-1) - 2 = 1 - 2 = -1
Sixth term = 2*2 - (-1) = 4 + 1 = 5
Seventh term = (-1)*(-1) - 5 = -4
Eight Term = 5*5 - (-4) = 29
```

Constraints

```
1<= N <= 15
```

Topic Tags

- **Recursion**

My code

```
// n java
import java.util.*;
```

```
import java.lang.*;
import java.io.*;

public class Main
{
	static int fun(int n)
	{
		if(n==2)
			return 1;
		if(n==1)
			return 0;
		return(fun(n-2)*fun(n-2)-fun(n-1))  ;
	}
	public static void main (String[] args) throws
java.lang.Exception
	{
		//your code here
		Scanner s=new Scanner(System.in);
		int n=s.nextInt();
		 n=fun(n);
		System.out.print(n);
	}
}
```