Viral Advertising ☆

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HackerLand Enterprise is adopting a new viral advertising strategy. When they launch a new product, they advertise it to exactly 5 people on social media.

On the first day, half of those 5 people (i.e., $floor(\frac{5}{2}) = 2$) like the advertisement and each shares it with 3 of their friends. At the beginning of the second day, $floor(\frac{5}{2}) \times 3 = 2 \times 3 = 6$ people receive the advertisement.

Each day, $floor(\frac{recipients}{2})$ of the recipients like the advertisement and will share it with 3 friends on the following day. Assuming nobody receives the advertisement twice, determine how many people have liked the ad by the end of a given day, beginning with launch day as day 1.

For example, assume you want to know how many have liked the ad by the end of the 5^{th} day.

Day	Shared	Liked	Cumulative
1	5	2	2
2	6	3	5
3	9	4	9
4	12	6	15
5	18	9	24

The cumulative number of likes is 24.

Function Description

Complete the viralAdvertising function in the editor below. It should return the cumulative number of people who have liked the ad at a given time.

viralAdvertising has the following parameter(s):

- n: the integer number of days

Input Format

A single integer, n, denoting a number of days.

Constraints

- $1 \leq n \leq 50$

Output Format

Print the number of people who liked the advertisement during the first n days.

Sample Input

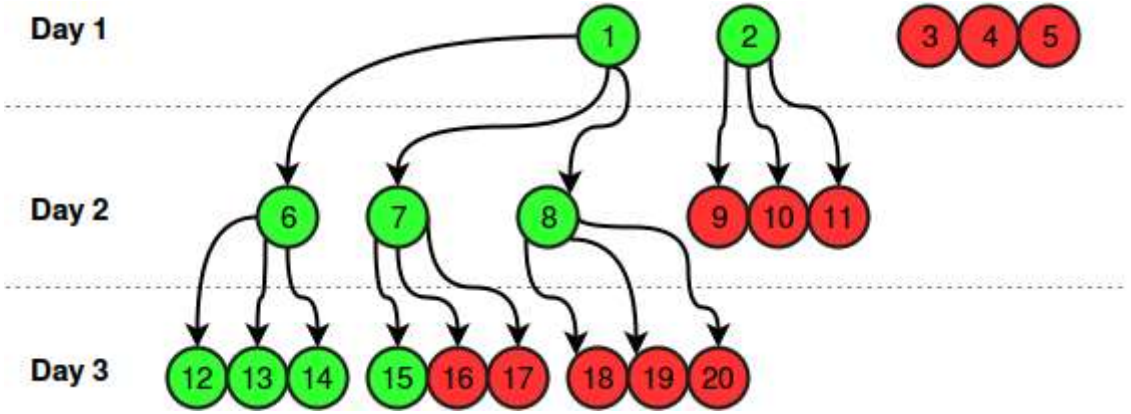
```
3
```

Sample Output

```
9
```

Explanation

This example is depicted in the following diagram:



$\mathbf{2}$ people liked the advertisement on the first day, $\mathbf{3}$ people liked the advertisement on the second day and $\mathbf{4}$ people liked the advertisement on the third day, so the answer is $\mathbf{2+3+4=9}$.

Change Theme Python 3

```
n = int(input())
shared = 5
total_opened = 0

for _ in range(0, n):
    opened = int(shared / 2)
    total_opened = total_opened + opened
    shared = opened * 3

print(total_opened)

```

Line: 1 Col: 1

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Congratulations!

You have passed the sample test cases. Click the submit button to run your code against all the test cases.

Sample Test case 0

Sample Test case 1

Input (stdin)

Download

```
1 3
```

Your Output (stdout)

```
1 9
2
```

Expected Output

Download

```
1
9
```