

OI) 选手”——报考杭州电子科技大学！

## Xiao Ming's Hope

Time Limit: 2000/1000 MS (Java/Others)    Memory Limit: 32768/32768 K (Java/Others)  
Total Submission(s): 2018    Accepted Submission(s): 1361

### Problem Description

Xiao Ming likes counting numbers very much, especially he is fond of counting odd numbers. Maybe he thinks it is the best way to show he is alone without a girl friend. The day 2011.11.11 comes. Seeing classmates walking with their girl friends, he couldn't help running into his classroom, and then opened his maths book preparing to count odd numbers. He looked at his book, then he found a question " $C_{(n,0)}+C_{(n,1)}+C_{(n,2)}+\dots+C_{(n,n)}=?$ ". Of course, Xiao Ming knew the answer, but he didn't care about that, What he wanted to know was that how many odd numbers there were? Then he began to count odd numbers. When  $n$  is equal to 1,  $C_{(1,0)}=C_{(1,1)}=1$ , there are 2 odd numbers. When  $n$  is equal to 2,  $C_{(2,0)}=C_{(2,2)}=1$ , there are 2 odd numbers..... Suddenly, he found a girl was watching him counting odd numbers. In order to show his gifts on maths, he wrote several big numbers what  $n$  would be equal to, but he found it was impossible to finish his tasks, then he sent a piece of information to you, and wanted you a excellent programmer to help him, he really didn't want to let her down. Can you help him?

### Input

Each line contains a integer  $n(1 \leq n \leq 10^8)$

### Output

A single line with the number of odd numbers of  $C_{(n,0)}, C_{(n,1)}, C_{(n,2)} \dots C_{(n,n)}$ .

### Sample Input

```
1
2
11
```

### Sample Output

```
2
2
8
```

### Author

HIT

### Source

2012 Multi-University Training Contest 5

### Recommend

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