Solve the series

Given a series 7, 15, 32, …… Find the nth term of this series.

Examples :

Input : 5 Output : 138

Input : 7 Output : 568

Input Format

one integer

Constraints

$1 <= n <= 10^7$

Output Format

one integer

Sample Input 0

```
3
```

Sample Output 0

```
32
```