

Practice













Points: 100.00 Rank: 16228



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Summing the N series **■**



Problem

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You are given a sequence whose n^{th} term is

$$T_n = n^2 - (n-1)^2$$

You have to evaluate the series

$$S_n = T_1 + T_2 + T_3 + \dots + T_n$$

Find $S_n \mod (10^9 + 7)$.

Input Format

The first line of input contains \boldsymbol{T} , the number of test cases. Each test case consists of one line containing a single integer n.

Constraints

- $1 \le T \le 10$
- $1 \le n \le 10^{16}$

Output Format

For each test case, print the required answer in a line.

Sample Input 0

2 2 1

Sample Output 0

1

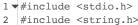
Explanation 0

Case 1: We have $\mathbf{4} = \mathbf{1} + \mathbf{3}$

Case 2: We have 1 = 1

Current Buffer (saved locally, editable) & •





- #include <math.h>
- #include <stdlib.h>

Submissions: 8980 Max Score: 20 Difficulty: Medium

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Need Help? Closed Form

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С

1 Upload Code as File

```
5
6 vint main() {
7
8    /* Enter your code here. Read input from STDIN. Print output to STDOUT */
return 0;
10
11
Line: 1 Col: 1
```

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