

[Practice](#)[Compete](#)[Jobs](#)[Leaderboard](#)

The email address you signed up with has not been verified. You won't be ranked on the leaderboard until you verify your account. ×

[Re-send the verification email](#)[All Competitions](#) > [CSI FE](#) > [Study Plan](#)

Study Plan

locked

by [bachkarakash](#)[Problem](#)[Submissions](#)[Leaderboard](#)[Discussions](#)

Abhishek is in the second year of college. There are N hours before semester exams so, he divided a N -hour study plan.

He may or may not study a particular hour, but he is very lazy and doesn't want to study consequently for more than 1 hour. Given the number of hours N , print the number of ways the N -hour plan can be completed.

Note that it is possible that N -hour plan completes even if he doesn't study. Print the answer as $\text{Ans} \% (10^9 + 7)$

Input Format

The first line contains T , the number of test cases.

Each test case contains a number N denoting the number of hours.

Constraints

 $1 \leq T \leq 80000$ $1 \leq N \leq 10^{17}$

Output Format

Each test case contains a single number denoting the number of ways by which the N -hour plan may be completed.

Sample Input 0

```
2
2
3
```

Sample Output 0

```
3
5
```

Explanation 0

In the first test case the plan can be completed by studying only in the first hour, only in the second hour or on no study at all.

In the second test case, the plan can be completed by any of the following combinations.

{}, {1}, {2}, {3}, {1,3}

f t in

Submissions: 12

Max Score: 70



Difficulty: Hard

Rate This Challenge:

☆☆☆☆☆

[More](#)

Need Help? Get advice from the [discussion forum](#) for this challenge. Or check out the [environments page](#)

Current Buffer (saved locally, editable)  

C++

```
1 #include <cmath>
2 #include <cstdio>
3 #include <iostream>
4
5 using namespace std;
6 int hours (int n)
7 {
8     int j,k,c=0;
9     for(j=1;j<=n;j++)
10     {
11         for(k=0;k<=n;k++)
12         {
13             if((n>=k)&&(k>(j+1)))
14             {
15                 c++;
16             }
17         }
18     }
19     return c;
20 }
21 int main() {
22     int t,n[10],m[10],a,x,y;
23     cin>>t;
24     a=t;
25     while(t!=0)
26     {
27         for(int i=0;i<t;i++)
28         {
29             cin>>n[i];
30             x=hours(n[i]);
31             m[i]=(x+1+n[i]);
32         }
33         t--;
34     }
35     for(int i=0;i<a;i++)
36         cout<<m[i]<<endl;
37     return 0;
38 }
```

Line: 1 Col: 1

 [Upload Code as File](#)



Test against custom input

Run Code

Submit Code

Join us on IRC at [#hackerrank](#) on freenode for hugs or bugs.

[Contest Calendar](#) | [Interview Prep](#) | [Blog](#) | [Scoring](#) | [Environment](#) | [FAQ](#) | [About Us](#) | [Support](#) | [Careers](#) | [Terms Of Service](#) | [Privacy Policy](#) | [Request a Feature](#)