Induction'17

Input file: standard input
Output file: standard output

Time limit: 1 second Memory limit: 64 megabytes

Induction'17 is going to start from Monday (24/07/17). Before giving the following problem to the new incoming students of our college, we thought of giving you a chance to solve it:

Given a function Induct(n) which is equal to sum of all the subsets of the set formed by first n natural numbers. For ex.- Induct(2)=1+2+1+2=6. Now, we defined another function Induction(n)=Induct(1)+Induct(2).....+Induct(n).

As the answer could be large print it modulo $10^9 + 7$.

Input

The first line of the input contains $T(1 \le T \le 10^5)$ - number of test cases. Each of the next T line contains an integer $n(1 \le n \le 10^9)$.

Output

Print the value of Induction(n) for given n.

Example

standard input	standard output
1	7
2	

Note

 $\begin{aligned} & \text{Induct}(1) = 1, \ (\{1\}) \\ & \text{Induct}(2) = 6, \ (\{1\} + \{2\} + \{1,2\}) \\ & \text{Induction}(2) = 7 \end{aligned}$