Fibonacci

The original problem statment where Fibonacci series appears for the first time in modern period is a very interesting one. It was a book by Leonard of Pisa, also known as Fibonacci, named Liber Abaci (1202) which brought such intersting series to the popularity.

Fibonacci considers the growth of an idealized (biologically unrealistic) rabbit population, assuming that: a newly born pair of rabbits, one male, one female, are put in a field; rabbits are able to mate at the age of one month so that at the end of its second month a female can produce another pair of rabbits; rabbits never die and a mating pair always produces one new pair (one male, one female) every month from the second month on. The puzzle that Fibonacci posed was: how many pairs will there be in one year?

- At the end of the first month, they mate, but there is still only 1 pair.
- At the end of the second month the female produces a new pair, so now there are 2 pairs of rabbits in the field.
- At the end of the third month, the original female produces a second pair, making 3 pairs in all in the field.
- At the end of the fourth month, the original female has produced yet another new pair, the female born two months ago produces her first pair also, making 5 pairs.

At the end of the nth month, the number of pairs of rabbits is equal to the number of new pairs (which is the number of pairs in month n − 2) plus the number of pairs alive last month (n − 1). This is the nth Fibonacci number.

This series can be broken down as the following series:
$Fib_0 = 0$
$Fib_1 = 1$
$Fib_n = Fib_{n-1} + Fib_{n-2}$, n > 1

First few elements of Fibonacci series are: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377...

You are given a list of non-negative integers. For each integer, n, in the list print n^{th} fibonacci number modulo 10^8+7.

Input Format
The first line contains an integer T, denoting the number of test-cases. T lines follow, each representing a test case. In each line there is a non-negative integer, n.

Output Format
For each test case, print Fib_n % (10^8+7).

Constraints
$1 <= T <= 10^4$
$0 <= n <= 10^4$

Sample Input #0

```
5
0
1
5
10
100
```

Sample Output #0

```
0
```

```
1
5
55
24278230
```