

Yogi and Jinx

Yogi is preparing for *ACM-ICPC 2016*. Each day he is learning a new topic. Today he has decided to learn recursion. After getting familiar with the basics he decided to solve some problems. He is enjoying as recursion seems very easy to him until he gets this problem. Given the following pseudo code and **N**, you need to tell the output **modulo 1000000007**.

```
fun(N)
  ans = 0

  if (N == 1)
    return 1

  for i in [1,N]
    if (i == 1 or i == N)
      ans = ans + 3
    else
      ans = ans + fun(i - 1) + fun(N - i)

  return ans
```

After trying a lot and getting frustrated, he goes to *Jinx* and shows him the question. *Jinx* is very experienced with recursion and he would solve it in minutes. Can you solve it faster than *Jinx*?

Input Format

First line of the input consists of an integer **T** denoting the number of test cases. **T** lines follows. Each of the testcases contains an integer **N**.

Constraints

$$1 \leq T \leq 10^4$$
$$1 \leq N \leq 10^9$$

Output Format

Output consists of T lines. Each line of the output contains the answer for the given N, **mod 10⁹+7**

Sample Input

1
2

Sample Output

6

Explanation

Clear from the pseudo code.