

Project Euler #78: Coin partitions



This problem is a programming version of [Problem 78](#) from [projecteuler.net](#)

Let $p(n)$ represent the number of different ways in which n coins can be separated into piles. For example, five coins can be separated into piles in exactly seven different ways, so $p(5) = 7$.

```
00000
0000 0
000 00
000 0 0
00 00 0
00 0 0 0
0 0 0 0 0
```

How many different ways can N coins be separated into piles?

As answer can be large, print $\%(10^9 + 7)$

Input Format

First line of the input contains T , which is number of testcases. Each testcase contains N .

Constraints

$$1 \leq T \leq 100 \quad 2 \leq N \leq 6 \times 10^4$$

Output Format

Print the output corresponding to each testcase on a new line.

Sample Input

```
2
5
6
```

Sample Output

```
7
11
```