

# 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 separated into piles in exactly seven different ways, so  $p(5) = 7$ .



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
```