Project Euler #76: Counting summations



Problem Statement

This problem is a programming version of Problem 76 from projecteuler.net

It is possible to write five as a sum in exactly six different ways:

$$4+1$$
 $3+2$
 $3+1+1$
 $2+2+1$
 $2+1+1+1$
 $1+1+1+1+1$

How many different ways can N be written as a sum of at least two positive integers?

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

 $\begin{array}{c} 1 \le T \le 100 \\ 2 \le N \le 1000 \end{array}$

Output Format

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

Sample Input

2 5 6

Sample Output

6 10