Project Euler #76: Counting summations

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: $\frac{1}{80} = \frac{1}{80} & 4 + 1 \\ & 3 + 2 \\ & 3 + 1 + 1 \\ & 2 + 2 + 1 \\ & 2 + 1 + 1 + 1 + 1 \\ & 1 + 1 + 1 + 1 + 1 + 1 + 1 \\ & 2 + 1 + 1 + 1 + 1 \\ & 1 + 1 + 1 + 1 + 1 + 1 + 1 \\ & 1 + 1 + 1 + 1 + 1 + 1 \\ & 1 + 1 + 1 + 1 + 1 \\ & 1 + 1 + 1 + 1 + 1 \\ & 1 + 1 + 1 + 1 \\ & 1 + 1 + 1 + 1 \\ & 1 + 1 + 1 + 1 \\ & 1 + 1 + 1 + 1 \\ & 1 + 1 + 1 + 1 \\ & 1 + 1 + 1 + 1 \\ & 1 + 1 + 1 + 1 \\ & 1 + 1 + 1 + 1 \\ & 1 + 1 + 1 + 1 \\ & 1 + 1 + 1 + 1 \\ & 1 + 1 + 1 + 1 \\ & 1 + 1 + 1 + 1 \\ & 1 + 1 + 1 + 1 \\ & 1 + 1 + 1 \\$ 1\end{align}\$\$

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

\$1 \le T \le 100\$ \$2 \le N \le 1000\$

Output Format

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

Sample Input

2

5 6

Sample Output

6

10