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:

 $egin{array}{c} 4+1 \\ 3+2 \\ 3+1+1 \\ 2+2+1 \\ 2+1+1+1 \\ 1+1+1+1+1 \end{array}$

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 $oldsymbol{T}$, which is number of testcases. Each testcase contains $oldsymbol{N}$.

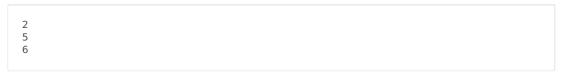
Constraints

$$\begin{array}{l} 1 \leq T \leq 100 \\ 2 \leq N \leq 1000 \end{array}$$

Output Format

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

Sample Input



Sample Output

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6
10
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