

1542 - Yet Another Permutations Problem

Description

How many permutations of the first N numbers exist such that the maximum element between the indices [i..j] is either present at index i, or at index j ?

Input specification

The first line contains the number of test cases T. Each of the next T lines contains an integer N.

Output specification

Output T lines containing the required answer for the corresponding test case. Since the answers can get really big, output the result modulo 1000000007.

Sample input

```
1
2
```

Sample output

```
2
```

Hint(s)

$1 \leq T \leq 10000$ $1 \leq N \leq 1000000000$

Source	Sphere Online Judge
Added by	ejaltuna
Addition date	2011-10-11 19:17:53.0
Time limit (ms)	10000
Test limit (ms)	1000
Memory limit (kb)	65536
Output limit (mb)	64

Caribbean Online Judge

Size limit (bytes)	100000
Enabled languages	C C# C++ Java Pascal Perl PHP Python Ruby Text