

Factorial large

Given a number n print its factorial $\%(10^9+7)$

Input

First line contains an integer t ($t \leq 10000$).

t lines follow. Each line contains an integer n . ($0 \leq n \leq 1000000$)

Output

For each test case print factorial(n) $\%(10^9+7)$

Example

Input:

```
5
2
3
1
400
0
```

Output:

```
2
6
1
390998217
1
```