

# The Chain Reaction

Aayush enters the Algorithms' class late. His teacher is angry with him, so in order to punish him he asks him to solve a problem. In case Aayush is not able to solve the problem his current A grade will be converted into B. The problem statement is - "Given the below recursive function he needs to figure out how many times the given function will call itself". Help him save his grade.

```
f(n)

{ if n <= 2

    return 1

else

    return f(n-1)*f(n-2)*f(n-3)

}
```

## Input

First line contains the number of test cases T. T test lines follow each containing a integer N.

## Output

One result for each test case equal to the number of recursive function calls. Each output in new line. As the result could be very large print it modulo  $10^9 + 7$ .

## Example

**Input:**

3  
2  
3  
4

**Output:**

0  
3  
6

**Range:**

$1 \leq T \leq 1000$   
 $1 \leq N \leq 10^{15}$