
Fibonacci numbers (1)

P72994_en

The Fibonacci numbers F_n are defined as follows:

$$F_n = \begin{cases} 0 & \text{if } n = 0 \\ 1 & \text{if } n = 1 \\ F_{n-1} + F_{n-2} & \text{if } n \geq 2 \end{cases}$$

Therefore, the first Fibonacci numbers are 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, ...

For every given natural number n , compute $F_n \bmod 10^8 + 7$.

Input

Input consists of several n . Assume $0 \leq n \leq 10^5$.

Output

For every given n , print $F_n \bmod 10^8 + 7$.

Sample input

```
0
1
10
100000
```

Sample output

```
0
1
55
33178829
```

Problem information

Author : Salvador Roura

Generation : 2024-05-02 22:54:15

© Jutge.org, 2006–2024.

<https://jutge.org>