Problem E. Binary Strings with no adjacent 1s

OS   Linux

Find of number of binary strings of length N, such that there are no adjacent 1s in that string.

Input Format

First line of input contains T - number of test cases. Its followed by T lines, each line contains N - length of the binary string.

Constraints

1 <= T <= 100000
1 <= N <= 100000

Output Format

For each test case, print the number of binary strings of length N, separated by newline. Since the answer can be very large, print answer % 1e9+7.

Sample Input 0

```
5
3
11
7
5
500
```

Sample Output 0

```
5
233
34
13
73724597
```

Explanation 0

Test Case 1
You can construct the following binary strings of length 3 with no adjacent 1s:
000, 001, 010, 100, 101