

# New Currency Shopping

Imagine that you have only one rupee and two rupee coin with you. Given a sum “n” to pay to the shopkeeper using only these 2 coins, in how many ways can it be done? Since the answer can be pretty large, print the answer modulo “12345678901”. Also, the order in which the coins were given matter.

## Input

The first line contains the number of test cases ‘t’. Then t lines follow, each having a number ‘n’.

## Output

For each number ‘n’ output the corresponding answer, after modulo operation.

## Constraints-

$$T \leq 10^4$$

$$1 \leq N \leq 10^{18}$$

## Sample Input

2

1

2

## Sample Output

1

2