

Project Euler #31: Coin sums



This problem is a programming version of [Problem 31](#) from [projecteuler.net](#)

In England the currency is made up of pound, **£**, and pence, **p**, and there are eight coins in general circulation:

1p, 2p, 5p, 10p, 20p, 50p, £1 (100p) and £2 (200p).

It is possible to make **£2** in the following way:

$$1 \times £1 + 1 \times 50p + 2 \times 20p + 1 \times 5p + 1 \times 2p + 3 \times 1p$$

How many different ways can ***N* p** be made using any number of coins? As the result can be large print answer mod $(10^9 + 7)$

Input Format

The first line contains an integer ***T***, i.e., number of test cases.

Next ***T*** lines will contain an integer ***N***.

Note: N is given as ***p*** and not **£**

Constraints

$$1 \leq T \leq 10^4$$

$$1 \leq N \leq 10^5$$

Output Format

Print the values corresponding to each test case.

Sample Input

```
3
10
15
20
```

Sample Output

```
11
22
41
```