

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:

$$1p, 2p, 5p, 10p, 20p, 50p, \text{£}1 \text{ (100p)} \text{ and } \text{£}2 \text{ (200p)}.$$

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

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

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 £

Output Format

Print the values corresponding to each test case.

Constraints

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

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

Sample Input

```
3
10
15
20
```

Sample Output

```
11
22
41
```