

# Project Euler #31: Coin sums

## Problem Statement

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 £

## 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
```