# E. Flibonakki

Time limit: 0.149s Memory limit: 1536 MB

G(n) is defined as

G(n) = G(n-1) + f(4n-1) , for n > 0

and G(0) = 0

f(i) is ith Fibonacci number. Given n you need to evaluate G(n) modulo 1000000007.

## Input

First line contains number of test cases t (t<40000). Each of the next t lines contain an integer n ( 0 <= n < 2^51).

## Output

For each test case print G(n) modulo 1000000007.

## Example

**Input:**

```
2
2
4
```

**Output:**

```
15
714
```

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