## Manasa and Combinatorics

Manasa has a string having $\mathbf{N}$ number of A's and $\mathbf{2 *} \mathbf{N}$ number of B's. She wants to arrange these characters in such a way that in each prefix and in each suffix of the string the number of B's is greater than or equal to the number of A's. Given the value of $N$, she wants to find the number of ways to do so.

## Input Format

The first line contains an integer T i.e. number of test cases.
Next T lines will contain an integer N .

## Output Format

A single line containing number of ways MOD 99991.

## Constraints

$1<=\mathrm{T}<=25$
$1<=\mathrm{N}<=10^{12}$

Sample Input \#00

```
2
1
2
```


## Sample Output \#00

1
4

## Explanation

In first case, "BAB" is only valid string.
In second case, "BBAABB", "BABABB" , "BBABAB" and "BABBAB" are valid strings.

