

# The Easiest Sequence Of the World!!

I just found the easiest and funny sequence ever !

Your task is simple. Just write a program to find the Nth term of this sequence!!

The sequence is as follows::

3, 8, 12, 17, 22, 28, 35....

## Input

First line contains  $t$  = number of test cases

and then next  $t$  lines follow  $n$ .

$1 \leq n \leq 10^{11}$

Note-- Value of  $n$  is modified to encourage better solutions!

## Output

Just the output the  $n$ th term modulo 123456789

## Example

**Input:**

3  
1  
2  
3

**Output:**

3  
8  
12