Fibonacci Finding (easy)

You're given three numbers: A, B, and N, and all you have to do is to find the number F_N where

$$F_0 = A$$
$$F_1 = B$$
$$F_i = F_{i-1} + F_{i-2} \ for \ i \geq 2$$

As the number can be very large, output it modulo $10^9 + 7$.

Consider the following link: http://en.wikipedia.org/wiki/Fibonacci_number#Matrix_form

Input Format

First line contains a single integer T - the number of tests. T lines follow, each containing three integers: A, B and N.

Constraints

$1 \leq T \leq 1000$
$1 \leq A, B, N \leq 10^9$

Output Format

For each test case output a single integer $-$ F_N.

Sample Input

```
8
2 3 1
9 1 7
9 8 3
2 4 9
1 7 2
1 8 1
4 3 1
3 7 5
```

Sample Output

```
3
85
25
178
8
8
3
44
```

Explanation

First test case is obvious.
Let's look through the second one:
$F_0 = 9$
$F_1 = 1$
$F_2 = 1 + 9 = 10$
$F_3 = 10 + 1 = 11$
$F_4 = 11 + 10 = 21$
$F_5 = 21 + 11 = 32$

$F_6 = 32 + 21 = 53$
$F_7 = 53 + 32 = 85$