数学公式

Description

Implement pow(A, B) % C.In other words, given A, B and C, find (A^ B)%C

Input

The first line of input consists number of the test cases. The following T lines consist of 3 numbers each separated by a space and in the following order:A B C'A' being the base number, 'B' the exponent (power to the base number) and 'C' the modular.Constraints:1 ≤ T ≤ 70,1 ≤ A ≤ 10^5,1 ≤ B ≤ 10^5,1 ≤ C ≤ 10^5

Output

In each separate line print the modular exponent of the given numbers in the test case.

Sample Input 1

```
3
3 2 4
10 9 6
450 768 51
```

Sample Output 1

```
1
4
34
```

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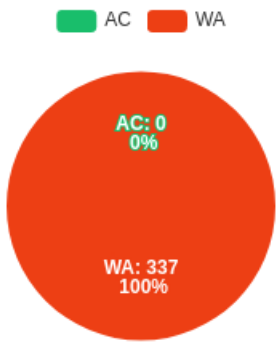
Information

ID	1
Time Limit	1000MS
Memory Limit	256MB
Created By	root
Level	Low
Tags	Show

Statistic Details



Language: C++ Theme: Solarized Light

```python
def f(a, b, c):
    k = 1
    while b > 0:
        if b % 2 == 1:
            k *= a
            k = k % c
        a = (a*a) % c
        b = b >> 1
    return k
n = int(input())
testcase = []
for i in range(n):
    testcase.append(list(map(int, input().split(" "))))
for i in range(n):
    print(f(testcase[i][0], testcase[i][1], testcase[i][2]))
```

Submit