Modular Arithmatic

Lab 4
Computer Programming
Due date: September 13, 2019, 10 PM

Problem Statement: Given T test cases and each test case has three integers inputs X,Y, M, find X^Y % M.

Input
The first line of input is T denoting the number of test cases. The next T lines have three integer X, Y and M respectively.
Output
For each test case, output X^Y % M
Constraints
$0 \leq T \leq 10^6$
$0 \leq X, Y \leq 10^9$
Note: X and Y are not simultaneously 0.
$1 \leq M \leq 2 * 10^9$

Sample Test Case

Input	Output
4 5 2 7 5 2 26 6 2 3 2 100 1000000007	4 25 0 976371285