Problem: Modular Operations

Time Limit 1 second

Problem

You are given three positive integers a, b and c. We know that there are four arithmetic operations: a + b, a – b, a x b, a ÷ b. We want to calculate these values modulo c, as the result of the calculation may be super large. However, sometimes it is impossible to find a ÷ b mod c (as we mentioned in the lecture). So, we ask you to write a program that calculates the value of (a + b) mod c, (a – b) mod c and (a x b) mod c.

Input

Your input consists of a single line. For each line, three positive integers a, b and c ($1 \le a, b, c \le 109$) are given.

Output

Print (a+b) mod c, (a-b) mod c and (a x b) mod c, separated by a space.

Sample Input 1	Sample Output 1
123 45 67	34 11 41

Sample Input 2	Sample Output 2
1999 1 21	5 3 4