

C. Line

time limit per test: 1 second

memory limit per test: 256 megabytes

input: standard input

output: standard output

A line on the plane is described by an equation $Ax + By + C = 0$. You are to find any point on this line, whose coordinates are integer numbers from $-5 \cdot 10^{18}$ to $5 \cdot 10^{18}$ inclusive, or to find out that such points do not exist.

Input

The first line contains three integers A , B and C ($-2 \cdot 10^9 \leq A, B, C \leq 2 \cdot 10^9$) — corresponding coefficients of the line equation. It is guaranteed that $A^2 + B^2 > 0$.

Output

If the required point exists, output its coordinates, otherwise output -1 .

Examples

input
2 5 3
output
6 -3