2019年USST-SIW 暑期 ICPC & CCPC Training

July 15, 2019 - July 21, 2019 & August 19, 2019 - August 25, 2019

Problem L. Kaguya with fbgcd

Input file: standard input Time limit: 1 second

Output file: standard output Memory limit: 256 megabytes

给出斐波那契数列的前两项 F_1, F_2 和N,需要你求出 $gcd(F_N, F_{N+1})$

Input

输入有一行三个整数 $F_1, F_2, N(1 \le F_1, F_2 \le 10^{12}, 1 \le n \le 10^{10})$

Output

输出一个整数表示答案

Sample

standard input	standard output
2 7 100	1