

J2 // What in the sequence is this?

Laniel Diu is barely passing his Functions class and he needs your help. His current math homework is determining the type of math sequence: Arithmetic, geometric, or no pattern. Help Laniel finish his math homework.

Arithmetic sequence: a sequence of numbers such that the difference between the consecutive terms is constant.

Geometric sequence: a sequence of numbers where each term after the first is found by multiplying the previous one by a fixed, non-zero number called the common ratio.

Input Format

The first line of input will contain **n**, the number of terms the sequence has.

The next **n** lines will contain the number (all integers) in the sequence.

Output Format

Output the **Arithmetic** if it is an arithmetic sequence, **Geometric** if it is a geometric sequence, or **None** if there is no sequence pattern. There will always be one answer.

Sample Input 1

5
1
2
3
4
5

Sample Output 1

Arithmetic

Sample Input 2

3
1
3
9

Sample Output 2

Geometric