ESCUELA COLOMBIANA DE INGENIERÍA PROGRAMACIÓN DE COMPUTADORES

Is this the easiest problem?

Extracted from: UVA 11479 Source file name: easiest.py Time limit: 1 second

A triangle is a geometric shape with three positive sides. However, any given three sides won't necessarily form a triangle. The three sides must form a closed region. Triangles are categorized depending on the values of the sides of a valid triangle. In this problem you are required to determine the type of a triangle.

Input

The first line of input will contain a positive integer T < 20, where T denotes the number of test cases. Each of the next T lines will contain three 32 bit signed integer.

The input must be read from standard input.

Output

For each case of input there will be one line of output. It will be formatted as:

Case x: triangle type

Where *x* denotes the case number being processed and *triangle type* is the type of the triangle. triangle type will be one of the following, depending on the values of the three sides:

- Invalid The three sides can not form a triangle
- Equilateral All three sides of valid triangle are equal
- Isosceles Exactly two of the sides of a valid triangle are equal
- Scalene No pair of sides are equal in a valid triangle

The output must be written to standard output.

Sample Input	Sample Output
4	Case 1: Invalid
1 2 5	Case 2: Equilateral
1 1 1	Case 3: Isosceles
4 4 2	Case 4: Scalene
3 4 5	