Problem 27: What Triangle Is This?

Difficulty: Easy

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Problem Background

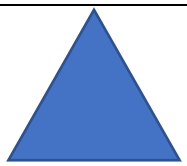
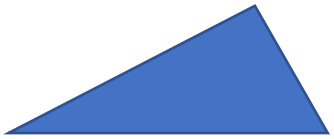
Do you know the Triangle Inequality Theorem? Just in case you don't, here it is:

The sum of the lengths of any two sides of a triangle is greater than the length of the third side.

That sounds easy enough, right? Your job is to write a program that can identify valid triangles.

Problem Description

Not only does your program need to determine if three sides can form a triangle - you also have to identify the type of triangle. There are three classifications of triangles:

		
Equilateral	Isosceles	Scalene
All three sides are the same length	Two sides are the same length; the third is a different size	All three sides have different lengths

Sample Input

The first line of your program's input, received from the standard input channel, will contain a positive integer representing the number of test cases. Each test case will include a single line containing three positive integers representing side lengths, each separated by a comma and a space.

```
4
20, 20, 23
20, 20, 20
20, 21, 22
13, 14, 30
```

Sample Output

For each test case, your program should output a single line of text identifying the type of triangle:

- "Not a Triangle" if the three sides cannot form a triangle, or
- "Equilateral", "Isosceles", or "Scalene", for the respective triangle types

```
Isosceles
Equilateral
Scalene
Not a Triangle
```