Problem I Is this the easiest problem? 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.

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:

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

Sample Input	Sample Output
4	Case 1: Invalid
125	Case 2: Equilateral
111	Case 3: Isosceles
442	Case 4: Scalene
345	

Problem Setter: Shamim Hafiz