11479   Is this the easiest problem?

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:

- `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.

Sample Input

```
4
1 2 5
1 1 1
4 4 2
3 4 5
```

Sample Output

```
Case 1: Invalid
Case 2: Equilateral
Case 3: Isosceles
Case 4: Scalene
```