

**Q7. Type and Area of Triangle (15 marks):**

Find the area of a triangle with the lengths of three sides, and determine which of the following types that the triangle belongs to:

- a. Scalene Triangle
- b. Isosceles Triangle
- c. Equilateral Triangle

**Write a program to**

**Input, 3 floating-point values, side1, side2, side3.**

**Output, in sequence,**

the type of the triangle (Scalene Triangle, Isosceles Triangle, or Equilateral Triangle) in the first line, and

the area of the triangle, rounded to an integer, in the second line.

**Note:** Display “Invalid” if the triangle cannot be formed from the three inputs of lengths.

**试题 2. 三角形的类型和面积（15 分）：**

输入三个边的长度，求所形成三角形的面积，并辨识此三角形属于以下那一种类型：

- a. Scalene Triangle(不等边三角形)
- b. Isosceles Triangle(等腰三角形)
- c. Equilateral Triangle(等边三角形)

**试写一程式以**

**输入** 三个浮点值, 即边长 1, 边长 2, 及边长 3

**依序输出**

在第一行输出三角形的类型 (Scalene Triangle, Isosceles Triangle 或 Equilateral Triangle), 及

在第二行输出三角形的面积（近似至整数）。

**请注意,** 如果无法从输入的值形成三角形, 则显示“Invalid”。

**Examples (例子)**

Input (输入)	Output (输出)
3 4 5	Scalene Triangle 6
36.6 17.0 40	Scalene Triangle 311
8 8 16	Invalid
6 6.0 11	Isosceles Triangle 13
67.00 67 67.0	Equilateral Triangle 1944

All Test Cases (所有测试用的例子)

Input (输入)	Output (输出)
3 4 5	Scalene Triangle 6
36.6 17.0 40	Scalene Triangle 311
8 8 16	Invalid
6 6.0 11	Isosceles Triangle 13
67.00 67 67.0	Equilateral Triangle 1944
34 56 56	Isosceles Triangle 907
17 17 -50	Invalid
9 7 0	Invalid