

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