1. Write a program that will read an arbitrary number of sets of three integers. The program should prompt the user for sets of numbers and process them until the user submits the number 000. For each set of three numbers, the program should first print the values read. It should then decide whether or not the three numbers could represent the lengths of the sides of a triangle, an appropriate message should be printed. If the numbers could not represent the lengths of sides of a triangle, an appropriate message should be printed. If they could, then the program should determine and state into which type of the triangle (equilateral, scalene, isosceles, acute, obtuse, or right) would be placed.

If the user provided input of

3 5 4

5 2 5

-7 1 2

0 0 0

Then the program should produce output something like the following:

Provide three side lengths – 0 0 0 to terminate

3 5 4 Triangle possible: scalene and right

Provide three side lengths – 0 0 0 to terminate

5 2 5 Triangle possible: isosceles and acute

Provide three side lengths – 0 0 0 to terminate

-7 1 2 Triangle can’t be formed.

Provide three side lengths – 0 0 0 to terminate

0 0 0 Program terminated by user.

Save your file as **Triangle\_yourName**

Due date: January 12, 2105

More data to test the program:

14 14 27 => isosceles and obtuse

5 5 10 => can’t form

7 7 7 => equilateral and acute