Relevant Programming Concepts:
_ Conditional branching structures (if-then-else statements)
_ Loop structures

Problem 1 (14 Points): Triangles
Three lengths (A, B, C) can be formed into a triangle if three conditions are met

$A + B > C$

$B + C > A$

$C + A > B$

An isosceles triangle is a triangle that has two sides of equal length.
Also, a right triangle is formed if any of the following is met

$A^2 + B^2 = C^2$

$B^2 + C^2 = A^2$

$C^2 + A^2 = B^2$

Write a C program that asks the user to enter three lengths. Check to see if the three lengths can be formed into an isosceles triangle, right triangle, triangle, or no triangle at all. Report the results to the user.
Sample Code Execution: **Bold text** indicates information entered by the user
Enter in three sides of a triangle A,B,C: **12.2 13.2 5**
Sides A = 12.20, B = 13.20, C = 5.00 can be formed into a triangle

Enter in three sides of a triangle A,B,C: 0**.2 12.2 13.2**
Sides A = 0.20, B = 12.20, C = 13.20 cannot be formed into a triangle

Enter in three sides of a triangle A,B,C: **13.6 8 13.6**
Sides A = 13.60, B = 8.00, C = 13.60 will form an isosceles triangle

Enter in three sides of a triangle A,B,C: **10.625 6.375 8.5**
Sides A = 10.63, B = 6.38, C = 8.50 will form a right triangle

Enter in three sides of a triangle A,B,C: **5 2 2**
Sides A = 5.00, B = 2.00, C = 2.00 cannot be formed into a triangle

Problem 2 (16 Points): For-Loop
Develop a C program that
- Asks the user to enter a value of N

- Finds and displays the total number of values from 100-499 (inclusive) that are divisible by N.
- Finds and displays the sum of all positive numbers from 100-499 (inclusive) that are divisible by N
- Finds and displays the maximum of a positive number from 100-499 (inclusive) that are divisible by N

Sample Code Execution: **Bold text** indicates information entered by the user
Enter value of N: **10**
There are 40 values between 100-499 that are divisible by 10
Sum of numbers between 100-499 that are divisible by 10 is 11800
Maximum number between 100-499 that are divisible by 10 is 490

Enter value of N: **23**
There are 17 values between 100-499 that are divisible by 23
Sum of numbers between 100-499 that are divisible by 23 is 5083
Maximum number between 100-499 that are divisible by 10 is 483

Enter value of N: **540**
There are 0 values between 100-499 that are divisible by 540
Sum of numbers between 100-499 that are divisible by 540 is 0
NO Maximum number between 100-499 that are divisible by 540

More Test cases: N = 1 (answer: 400 values, sum = 119800, max = 499),
                     N = 7 (answer: 57 values, sum = 17157, max = 497)