CS 1713
Introduction to Computer Programming II
Recitation 2

1. (100 pts) Write a program to find all the triangles with integer side lengths and a user specified perimeter. Perimeter is the sum of all the sides of the triangle. Integers a, b and c form a triangle if the sum of the lengths of any two sides is greater than the third side. Your program should find *all the triples a, b and c where $a + b + c$ is* user specified perimeter value. Print each triple only once in increasing order. For example, 3, 4 and 5 forms a triple with perimeter 12. Only print *3 4 5* instead of printing all the permutations of the triple.

   Sample output for this recitation is as follows

   ```
   Enter perimeter
   24
   Triangles with perimeter 24
   2 11 11
   3 10 11
   4 9 11
   4 10 10
   5 8 11
   5 9 10
   6 7 11
   6 8 10
   6 9 9
   7 7 10
   7 8 9
   8 8 8
   ```

   Test your program with different values for perimeter. Number of such triangles is know as Alcuin's sequence and list of values is available at http://oeis.org/A005044/list

   You need to use *nested loops* for this problem. Name your program *recitation2.c*

Submit your program electronically using the blackboard system