[redacted]

[redacted]

NOTES:

PART #2:You're expected to use the variables in places where they're needed only and with correct storage class duration keywords and modifiers.

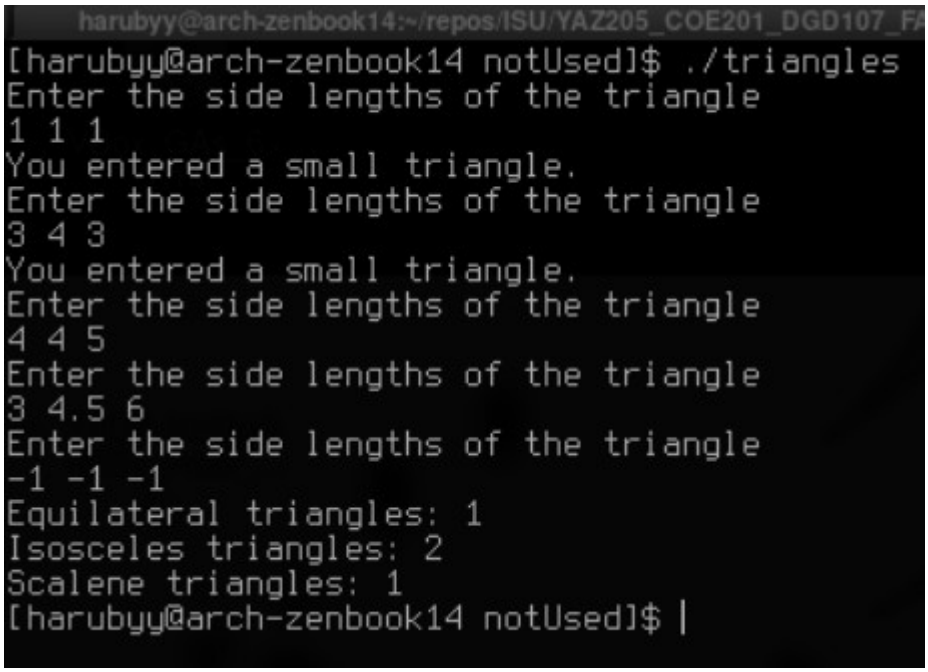
PART #1:

1. You will work on a 1D matrix filled with integer values, use an initializer list to fill in the array in the main function.
2. Define a **size** as a constant using the preprocessor directive "#define" for your 1D array.
3. Write a C function with the name "filter_greater_than" that filters an array and creates a new array out of it. The function takes
   a. An array to be filtered
   b. The pivot (the number that the values greater than the pivot will be used to create a new array)
   c. The new array created
   d. The size of the new array created
   e. The function returns nothing, think about the signature of your function accordingly.
4. In main function
   a. Choose a pivot randomly and assign a pointer to it
   b. Filter your array using "filter_greater_than" and print the filtered array on the screen

PART #2:

Write a C program that classifies triangles as equilateral, isosceles and scalene.

   a. The user will enter the three sides of a triangle until she enters all sides as -1. Assume that the user will enter only positive integers as sides and to end entering sides, she's guaranteed to enter all -1 (hence no other checks are required)
2. After the user finishes entering sides, print the count of equilateral, isosceles and scalene triangles **in the main function.**
3. Write a C function with the name "*classify_triangles"* that takes 3 sides and returns nothing. You must use this described prototype (you're not obliged to use a prototype but has to obey the return type, parameter list and function name described). The function
   a. counts equilateral, isosceles and scalene triangles.
   b. determines if a triangle is small
   c. a small triangle has its sum of sides <= 12
   d. print a message on the screen as "You entered a small triangle."


harubyy@arch-zenbook14:~/repos/ISU/YAZ205_COE201_DGD107_FA
[harubyy@arch-zenbook14 notUsed]$ ./triangles
Enter the side lengths of the triangle
1 1 1
You entered a small triangle.
Enter the side lengths of the triangle
3 4 3
You entered a small triangle.
Enter the side lengths of the triangle
4 4 5
Enter the side lengths of the triangle
3 4.5 6
Enter the side lengths of the triangle
-1 -1 -1
Equilateral triangles: 1
Isosceles triangles: 2
Scalene triangles: 1
[harubyy@arch-zenbook14 notUsed]$