

Recitation Assignment #1: Variables and Arithmetic

CS0007

Due: May 19th, at 11:59 PM

Instructions

The goal of this assignment is to test your ability to use simple variables and arithmetic operators. In this assignment you will be declaring variables, using them in arithmetic operations, and displaying the result to the screen. More specifically, you will be storing the lengths of three sides of a triangle in three variables, finding the perimeter and area of the triangle, and printing the results to the screen. At this point we have not talked about correct documentation. For now, just put your name on the first line of the program in a comment. In addition, you should perform the following steps:

1. Declare 5 variables: three for the lengths of the sides of the triangle, one for the perimeter and one for the area.
2. Assign the values of 2.3 5.9 and 7.2 to the variables holding the values of the sides.
3. Compute the perimeter of the triangle using the side variables and arithmetic operators and assign the result to the perimeter variable.
 - **Remember: the perimeter of a triangle is the sum of all the sides.**
4. Compute the area of the triangle using the side variables and arithmetic operators and assign the result to the area variable.
 - **Remember: you can use Heron's Formula to find the area of a triangle given the lengths of the sides. Heron's Formula is defined as $Area = \sqrt{s(s-a)(s-b)(s-c)}$ where a , b , and c are the lengths of the sides and $s = \frac{a+b+c}{2}$.**
5. Print to the screen the lengths of the sides of the triangle, the perimeter, and the area by printing the values of the respective variables in the EXACTLY in the form:

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The lengths of the triangle's sides are __, __, and __.
The perimeter of the triangle is __.
The area of the triangle is __.
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Each on its own line.

This is meant to be AN INDIVIDUAL ASSIGNMENT. Also, taking large segments of code from other sources without citing is plagiarism. The majority of this assignment should be YOUR OWN ORIGINAL WORK. I recommend getting a small storage device such as a flash drive to save your work on. You can get these for under \$20 at any Radio Shack, and many other stores. When you are done submit your project by zipping up the project folder and FTPing it to the drop box for this course as described in class and here: <http://www.cs.pitt.edu/~eth13/cs0007/submissionGuidelines.html>. On the course webpage there is a grading rubric which I will be grading from. Keep this in mind while doing the assignment.