**Take Home: Quiz 2 (15 pts) – Introduction to Computer Programming and C**

Using Canvas <https://canvas.wsu.edu/>, please submit your solution to the correct quiz folder. Your solution should be a .pdf file with the name <your last name>\_quiz2.pdf and uploaded. To upload your solution, please navigate to your correct Canvas ***lab*** course space. Select the “Assignments” link in the main left menu bar. Navigate to the correct quiz submission folder. Click the “Start Assignment” button. Click the “Upload File” button. Choose the appropriate .pdf file with your solution. Finally, click the “Submit Assignment” button.

1. (3 pts) Identify the three hard rules for user-defined identifiers. If a programmer breaks these rules, then the compiler will report a syntax error.

User-defined identifiers must:

1. Be made up of only letters, numbers, and underscores
2. Not begin with numbers
3. Not conflict with reserved words
4. (2 pts) What is a variable declaration? Explain.

Variable declaration is where the user creates a new variable of any type, and gives it a value. For example, I could declare a decimal variable named *number*, and set it to 0.0 (double number = 0.0;).

1. (2 pts) Why do we include <stdio.h> in many of our C programs? Explain.

Many programs in C use the functions printf() and scanf(), which requires the inclusion of <stdio.h> for them to work.

1. (5 pts) Provide each result for the following three C language expressions. Numbers listed without a decimal point are considered integer values and ones with a decimal point are considered double precision floating-point values.
   1. 17 - 3 \* 2 = 11
   2. 675 / 650.0 = 1.03846
   3. -7.0 \* -2 + 6 = 20.0
   4. 8 % 3 \* 5.5 = 11.0
   5. -19 - 3 / 7 % 2 + 1 = -18
2. (3 pts) Which C data types should be used to ***best*** represent the following? For each blank, you may list *int*, *double*, or *char* only. These types may be used multiple times.
3. The number of followers an account has on Instagram?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Each letter in “WSU”? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Tuition cost? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_