

## ENGR 0012 – Spring 2019 – HW7

Acceptable behaviors for this assignment include:

- Consulting your textbook or other written material
- Asking your team members
- Asking your professor or TA

Note that consulting materials and asking others is only acceptable as long as they do not provide you with the solutions – you have to come to the solution on your own!

Unacceptable behaviors for this assignment include:

- Copying the solution(s) from a solution manual, book, or other written material
- Copying the solutions(s) from assignments submitted in previous semesters
- Providing the solutions to a classmate, student in other section, student in future section, or online solution banks
- Asking someone to complete the assignment for you

This assignment is to get you familiar with data types and the I/O commands. Design a very basic C code that:

1. Displays the following statement: “I, *Your Name*, certify that I have completed this assignment in an honest manner.” Your assignment will not be graded if this statement is missing.
2. Displays the name of the class, your group number, your name, and your username. Have each piece of information on a new line.
3. Write the code to display these paragraphs:

The first `\n` puts the text on a new line, the double slash by the `n` is needed to allow the printing of the `\n` in this printout.

If you want to add a tab in the print out you insert `\t` it will tab the text as shown here.

Sometimes it is nice to print out text in "double quotes", this requires the double quote escape sequence `\"`. Sometimes it is nice to print out text in 'single quotes', this requires the single quote escape sequence `\'`.

Want to printout a `%` sign you need to use the escape sequence `"%%"`, do you understand the code required to print this sequence out\?

Finally, notice all the single slashes `'\'` at the end of each line. These allow you to wrap the `printf` string to the next line for easy reading. Make a bell ring at this point. Did you hear the bell ring?

4. Write the code to read in the following variables (use `scanf`):

`A = 1, B = 2.34, C = f.`

Define `A` as an `int`, `B` as a `double` and `C` as a `char`.

Then print out each variable, in a user-friendly manner.

Then print out each variable using a `int` format type.

Then print out each variable using a `double` format type.

Then print out each variable using a `char` format type.

What happens? Remember this.

5. Define the following array within the program, and print it out in a user-friendly manner:

`G = [3 5 8 9]`

6. Define the following array within the program and print it out in a user-friendly manner:

$$H = \begin{bmatrix} 4.4 & 5.5 \\ 6.6 & 7.7 \end{bmatrix}$$

Include a comment with your name and username at the top.

Include comments, indentation, and whitespace so that your program is neat and understandable to anyone who reads it.

**This is an individual assignment.** You need to submit the .c or .cpp file. Name you file Instructor\_Time\_HW7\_yourUserName (e.g. Mena\_10am\_HW7\_abc123) and upload the file through your class computer using the official file submission link (found on the desktop of class computers in GSCC 138 or BEH 229 at the beginning of the class when this assignment is due).