

**Homework #13**  
**Engineering 0012/0711 - Fall 2009**

**Due:** Monday, November 9

**Your task:** 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 name of the class, your group number, your class section, and the names of your group members and the date. Have each piece of information on a new line. You will reuse this part of the code for every future homework assignment.
- (2) 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 or reading. Make a bell ring at this point. Did you hear the bell ring?

- (2) Write the code to read in the following variables:  
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.
- (3) Define the following array within the c program, and print it out in a user friendly manner:  
$$G = [3 \ 5 \ 8 \ 9]$$
- (4) Define the following array within the c program and print it out in a user friendly manner:  
$$H = \begin{bmatrix} 4.4 & 5.5 \\ 6.6 & 7.7 \end{bmatrix}$$

**Turn in:**  
Folder with cpp file