PRG155 FINAL LAB PROJECT

Marks: 10% **Due: Week 14, lab class**

Problem:

Design and write a C language program that can be used as a **unit converter application.** Your unit converter should contain at least **four unit categories**, for example: length, mass, temperature, and time.

The program should display the main menu that contains unit categories that are available, and the user will be prompted to select a unit category first. After the unit category has been selected the program should then display another menu (i.e., a submenu) that contains at least three units or more for the chosen unit category. For example, if the mass unit category is selected, the units shown in its submenu could be: kilogram, pound, and ounce.

The user will be prompted next to enter a value (i.e., a floating point number) to be converted, as well as the two units from the submenu. The first unit is the unit to be converted, while the second unit is the unit to which the first unit will be converted. After these two units are selected, the program will compute and display the result of the conversion. The program will then prompt the user to return to the main menu and repeat the same process, or terminate the program.

Program requirements:
It is required to use the following C language constructs:

- User-Defined Functions
- Loops
- Decisions

Program documentation should contain the following:

- Signed cover page (second page attached to this project)
- Problem description
- Program algorithm (pseudocode and flowchart)
- Printout of the source code
- Samples of the program output

Hand in the following:
- a source code file that is submitted/attached electronically on the BlackBoard
- a printout of the program documentation

Under no circumstances will an extension be granted for this project. The project is due at the end of your last lab class and must bear the initials of the Lab supervisor you handed it in to.

Marking Scheme:
· Program Design: 45%
· Proper and Appropriate use of C constructs: 25%
· Documentation: 20%
· Output: 10%
· Early Submission Bonus: up to 10%
Total (100%) + Bonus

PRG155 – FINAL PROJECT

Student Name: _____
Student ID: _____
Section: ____
Date Submitted: _____

ACADEMIC HONESTY STATEMENT

My signature below constitutes my pledge that the entirety of this project is my own work. I understand and accept the following definition of plagiarism:
1. Plagiarism includes the literal repetition without acknowledgment of the works of another author. All significant phrases, clauses, or passages in this paper which have been taken directly from source material have been enclosed in quotation marks and acknowledged in the text itself as well as in the list of Works Cited or Bibliography.
2. Plagiarism includes borrowing another's ideas and representing them as my own. To paraphrase the thoughts of another without acknowledgment is to plagiarize. Plagiarism also includes inadequate paraphrasing. Paraphrased passages (those put into my own words) have been properly acknowledged in the text and in the bibliography.
3. Plagiarism includes using another person or organization to prepare this paper and then submitting it as my own work.
I understand what plagiarism is, and I further understand that if plagiarism is found in my paper, my professor will follow the procedures on academic dishonesty set forth by Seneca College.

Signed _____
Date _____