

Lab Exercise 5 (Part 1)

Focus

1. Define and call simple functions
2. Passing parameters to functions
3. Variable scope

This lab maps to learning objectives 1, 2, and 3 for Competency Five (part 1): Write a Working Program Using Functions that Include Parameters, Local, and Global Variables

Part 1A: Design a Solution

For this portion of the lab, *you will reuse the program you wrote in Lab 4.*

That means you will open the lab you wrote in the previous assignment and change it. You should NOT start from scratch. Also, all the requirements/prohibitions from the previous lab MUST also be included /omitted from this lab.

Redesign the solution using functions. For this lab:

1. You will define a function named `main()` **(LO 1)**
2. You will get input in the main function and **pass** it to the following functions: **(LO 2)**
 - a. `milesToKm()`
 - b. `FahToCel()`
 - c. `GalToLit()`
 - d. `PoundsToKg()`
 - e. `InchesToCm()`
3. Each function will require that you have a local variable to store the result of the calculation. This result will then be displayed using the print statement from within the function **(LO 1, 2, 3)**

Part 1B: Code

Use the design you created in part A. Write a complete and syntactically correct Python

program. Use the IDLE programming environment if you are using Python with IDLE. Some of you may be using Komodo or some other Python IDE. Please save your file as `firstname_lastname_Lab5A.py` where you will replace `firstname` and `lastname` with your actual first name and last name. Remember to use the extension `.py`.

Run and test your program. Once you are sure it works you will turn in the items listed in the next section.

Turn In

All labs will be graded in Blackboard. Once you are done with the lab turn it in to the Lab 5 PartA link. Please read the How To Submit instructions if you have any questions or contact the instructor / academic coach. For this lab you will turn into Blackboard:

1. The Python *codefile* you saved in part B