

Programming Assignment #0

This assignment will help you get acquainted with the basics of C, your software IDE, and our course's submission process. Please take the time to read all the instructions and complete each of the 3 sections provided. You are **NOT** allowed to use any libraries.

Setup

Begin by downloading the starter file provided on Canvas and creating a new project on CLion. You will be completing the functions described below in `pa0.c`.

We have provided `pa0_test.c` which contains a main that you can use to test your code. Please note that `pa0_test.c` currently only tests the example inputs and is not sufficient to verify your code works. Feel free to modify this file as it will not be turned in.

Part a)

Write the function `double computeSquare(double x)`. The function will take a `double` as an input and should return x^2 :

Example input:

8.5

Example output:

72.250000

Part b)

Write the function `int gcd(int y, int z)` that takes in two **non-zero** `int` inputs `y` and `z` and returns the greatest common divisor (GCD) of the two numbers.

Example input:

15

10

Example output:

5

Part c)

Write the function `void findSumPrimes(int x)` that takes in a **non-negative** `int` variable `x` and returns the sum of all the prime numbers less than or equal to `x`. You should use the helper method `int isPrime(int num)` that is provided.

Example input:

15

Example output:

41

Submission

You should submit `pa0.c` to the corresponding Gradescope assignment. Do **NOT** change the name of `pa0.c` and do **NOT** submit `pa0_test.c`.