CS 5393 C++ FOR CS: LAB 1
DEBUGGING WITH GIT

Overview: In this lab you will create 2 branches to resolve a syntax and runtime error and merge results back to main while maintaining the total character count between all files.

Repo Link: https://classroom.github.com/a/oHrptRA

Due: September 30, 2024 @ 11:59pm.

Code Requirements (80%):

- There are two bugs (syntax and runtime) within the code, each should be fixed independently. The syntax error should be fixed first, then the runtime error.
    - However, you have an extremely limited "budget" to account for these changes, you are allowed to make only minimal edits, and each error must only be resolved by making adding or deleting a single character.
    - The total character count of all files should remain constant when both bugs are fixed (i.e. The total number of characters summed across all files with the bug fixes must be the same as the number of characters at the start, so if you remove 1 character to fix the first bug, you must add 1 character to fix the second bug).
- What do we mean by "character"?
    - A character can be:
    - A letter (e.g., a, b, c)
    - A punctuation mark (e.g., ;, .)
    - An operator (e.g., +, *, =)
    - A symbol (e.g., &, *)
- You should create a branch called "syntax".
    - This branch should be used to fix the syntax error.
    - Once the error has been resolved, "syntax" should be merged into main
- You should create a branch called "runtime".
    - This branch should be used to fix the runtime error
    - Once the error has been resolve, "runtime" should be merged into main.

Report Requirements (20%):

- Create a document to describe the both the syntax and runtime errors.
- Give a description of what the error was as well as what the resolution was.
- Give a description of any good code practices associated with the errors.

If your project fails the compile action upon final push to git repo, it will receive a 0. Be sure to resolve any issues with the compile action prior to deadline.