Assignment 6
CS2600, Fall 2022

In this programming assignment, you will demonstrate your ability to write an intermediate Unix program utilizing systems calls by writing a version of the `tee` program.

Program Requirements

Your program should implement a subset of the functionality of the `tee` program, as implemented on the Unix system. The functionality to be implemented is described below.

Begin by familiarizing yourself with the `tee` program on the Unix system, both by reading the `man` pages and by running the command itself.

In its simplest form, `tee` accepts zero or more filenames on the command line. `tee` accepts unlimited data from standard input, and copies that data to standard output, as well as to each filename given on the command line. Thus, `tee` acts analogously to an electrical `tee` connector, sending a complete copy of the data received on standard input to all requested output files (including standard output).

`tee` also accepts several command line options, which may be interspersed along with the files to be processed. Your program should also handle the following option:

- "`-a`". If specified, the program should append the data to each file, rather than overwriting the data in the file (the default behavior).

Program NON-Requirements

You are *only* required to implement the features as described above. In particular, note that you are *not* asked to do *any* of the following:

- Handle any of the extended arguments (`"--append", "—ignore-interrupts", "--help", "--version"`).
- Handle "`-`" as a file name.

Your program will be tested by running the program, using various options, and comparing the results to that given by the Unix version of `tee`.

Submitting Your Program

Before 11:59:59 p.m., Tuesday, December 6, you must upload a zip archive to the course Canvas assignment for Assignment 6. This zip archive must contain all source code files for your *C-code program* and a *README* file of the Information on how to compile and run your program.