CSCD 240
Lab 7

1. In Java you most likely created a FileUtil class. Let's emulate that same concept in C. Create fileutil.c and fileutil.h

   - Create an openInputFile function that takes a char array as the parameter, representing the filename. The function will open that file for reading and return the FILE pointer. If the file does not exist you must reprompt until the file exists and is open.

   - Create promptOpenInputFile function that prompts the user for the filename, the function will open that file for reading and return the FILE pointer. If the file does not exist it will continue to prompt for the filename.

   - Create an openOutputFile function that takes a char array as the parameter, representing the filename. The function will open that file for writing and return the FILE pointer. If the file can't be opened the function will print an error message and exit the program.

   - Create promptOpenOutputFile function that prompts the user for the filename, the function will open that file for writing and return the FILE pointer.

   - Create a test program named cscd240Lab7.c that does the following:

     o Tests openInputFile and openOutputFile by passing the name of the files
     o Read the strings in and write them to the output file
     o Closes both files
     o Tests promptOpenInputFile and promptOpenOutputFile by prompting for the file names. Don't forget to test for an invalid file name.
     o Read a set of numbers in from the input file and write that set of numbers to the output file.
     o Close both files.

TO TURN IN:

A zip file containing
   - All .c files
   - fileutil.h
   - A Makefile with a target of lab7
   - An output file name cscd240lab7out.txt

Name your zip your last name first letter of your first name lab7.zip (Example steinerslab7.zip)