CSCD 240
Lab 12

SPECIFICATIONS:

Part 1
I have provided **cscd240_s13_lab12_1Tester.c**

1. You have a function call named **openFilePrompt**. In this function you will Prompt the user for a file name, and then open that text file, in the current directory, using fopen. You must have a dynamic library named libdynfileutil.so

2. You have a function named **openOutputLow**. In this function you will prompt the user for an output file name, and open that output file, using the low-level open system call.
    - The output file will be created with permissions of 0755.

3. You have a countRecords function. This function will be in libdynfileutil.so

4. You have a readDirection function. This function will return a L or R (You must ensure this, and it will update the shift variable to be the number that the strings will be shifted – This number will be between 0 and 26, the user should be able to enter 500 if s/he wants.

5. You have a processFile function. This function does the following:

    - First line of output writes the total number of lines using low level write
    - Using low level writes the direction and the shift value
    - Line by line uses fscanf/fgets to read a line and then
        - Writes the number of characters in the line using low level write
        - Writes that line encoded
        - (A shifted R 1becomes a B – Z shifted R 1 becomes A)
        - Same game but reverse for L
        - NOTE: you will not write a carriage return for any line. This will be one continuous document of a number, then encoded string, a number then a encoded string.

6. Close your input file and output file.

Part 2
I have provided **cscd240_s13_lab12_2Tester.c**

Reproduce Part 1, except just opposite. Everything that was high level reads now becomes low level reads, low level writes become high level writes to the screen. You should get back the original input file converted from the encrypted file. Don't forget to close your file.

TO TURN IN:

A zip only containing the following

- Folder named part1 containing
  - cscd240_s13_lab12_1Tester.c
  - lab12_1.h
  - libdynfileutil.so
  - dynlib.h
  - words.txt
  - encrypted.bin
  - lab12_1.c
- Folder named part2 containing
  - cscd240_s13_lab12_2Tester.c
  - lab12_2.h
  - lab12_2.c
  - encrypted.bin

Zip these files into a file with the name of your last name first letter of your first name lab 12.zip (Example steinerslab12.zip)