OVERVIEW

In this programming assignment, students need to count the frequency of each alphabet letter (A-Za-z, total 52 case sensitive) and five special characters ('.', ',', ':', ';' and '!') in all the .txt files under a given directory.

ASSIGNMENT

You will be provided a zero.zip which includes the following files:

```
makefile
count.h
specialcharcount.c
alphabetcount.c
testalphabetcount.c
testspecialcharcount.c
README
```

Your assignment is to write/modify code in the following files

```
count.h
makefile
alphabetcount.c  to count the frequency of alphabet letters; and
specialcharcount.c to count the frequency of special characters.
README to explain your code and include your test result
```

Note: Feel free to do any change of these files (fill the code, create new functions and etc). You also can create new .h and .c files if needed.

The instructor will use the following files to test your code, so please DON'T modify these two files:

```
testalphabetcount.c
testspecialcharcount.c
```

your program must execute correctly on Edoras machine, the instructor/TA will type the following commands to test your code:

```
make testalphabet  // generate testalphabet executable file
make testspecial   // generate testspecial executable file
./testalphabet   // run the testalphabet program to count frequency of alphabet
letters, the result will be stored in the file result.txt under result folder
./testspecial          // run the testspecial program to count frequency of
special characgters, the result will be stored in the file specialresult.txt
under result folder.
```

DIRECTIONS TO COMPLETE YOUR ASSIGNMENT

1. Download the source code zero.zip and data.zip from piazza
2. Login Edoras machine and create a new folder called programming under your account
3. Upload zero.zip and data.zip to Edoras using sftp to programming folder
4. Unzip the zero.zip and data.zip on edoras using the commands:
   ```
   unzip zero.zip
   unzip data.zip
   ```
   so you will have two folders: zero (source files) and data (.txt files) under programming directory on edoras machine
5. Create a new folder named result under the programming folder
6. Modify source files under folder zero to complete this assignment
7. Test your program to make sure it works correctly.
8. Write README file to explain your code and include your test result

HOW TO SUBMIT YOUR ASSIGNMENT

- The source files under the *zero* folder on edoras machine will be considered for grading.
- Please finish your coding by **12:00pm July 8th** and make sure your program must execute correctly on edoras. Any code change after this deadline may NOT be considered.
- Excuses of "but it worked on my machine" will not be accepted, so if you develop elsewhere, plan to leave time for any migration problems that might arise.