

A common utility on Unix/Linux systems is a small program called "wc." This program analyzes a file to determine the number of lines, words, and characters contained therein. Write your own version of wc. The program should accept a file name as input and then print three numbers showing the count of line, words, and characters in the file.

Another analysis that can be done on a file is the average number of each letter. Using the same file, create a running total of each letter in the alphabet. Since you haven't learned about lists yet, you will need a separate variable for each letter. Once you have all the totals, find the average. Since you won't need the totals again, you can store the average back into the total variables.

Display the averages in a form similar to the following:

A	B	C	D	E	F	G	H	I	J	K	L	M
XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX

Where XX is the average for that particular letter.

Be sure to use functions. You should have at least three function (but you can use more if you need them). There should be a main function; a function to calculate and display the number of lines, words and characters; and a function to calculate and display the average of each letter.

Add the following comments to the beginning of the program.

Name: Your Name
Class and Section: CS 120 01
Assignment: Final Project
Due Date: See above
Date Turned in:
Program Description: You write a short description of what the program will do

When you complete the program, do the following.

1. Turn in a printout of the source code
2. Create a folder with the following name: **Final Project**
3. Copy your program to this folder
4. Copy the folder to the following location: I:\kopp\inbox\CS 120 01\your name where your name is a folder located in I:\kopp\inbox\CS 120 01.

OVER

EXTRA CREDIT: 10 Points

We will be talking about lists in class the last week. When you write the program, use a list to hold the number of lines, words and characters for part 1 and a lists to hold the total of each letter and the average of each letter.

OVER