**Assignment**

This program is able to read in a text file and output the frequency of each work in the file. The 'experts' will use this data to analyze and compare the writing of Shakespeare to modern day poets and play writes.

The input files are likely to have punctuation at the end of some words. Those punctuation marks should be discarded so that the following two inputs would be considered equivalent: **hello** and **hello,**. In addition, I have ignored quotes, such that **'hello'** and **hello** are equivalent. The following punctuation at the end of a word have been deleted:

* !
* .
* ,
* ?
* ;
* :
* -
* |

And the following punctuation AROUND words have been deleted:

* '

**Return Values, Errors and Error Handling**

My program checks to see that a single filename is specified on the command line. If it is not, the program prints out the following error to STDERR:

Usage:

main filename

'main' is the name of the executable is determined *dynamically*. Thus, if the name of the executable was changed to 'count', the help would be:

Usage:

count filename

If the file specified by the user cannot be opened, the program prints the following error message to STDERR:

count: nofile: No such file

Again, 'count' is the name of the executable determined dynamically, and 'nofile' is the name of the file the user specified. The program has an exit code of '2' in this scenario.

If the program successfully runs, it sets the exit code to '0'.

**Input File**

Given a file with the following data (lorem.txt):

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed ante tortor,

sollicitudin a laoreet sed, convallis sed mi. In volutpat sollicitudin

felis, quis pharetra nibh aliquet id. Fusce vel sapien non nisi blandit

sollicitudin nec sed dolor. Mauris commodo, eros et tincidunt imperdiet,

leo metus dapibus justo, vel placerat urna risus sed nibh. Duis sed metus

sit amet mauris tempor lacinia. Duis eu dolor ipsum, ac tincidunt quam.

Pellentesque vestibulum vehicula congue. Pellentesque commodo orci id ante

gravida et auctor ligula volutpat. Cras mattis felis sit amet mi gravida

tempor vulputate tellus venenatis. Proin tempus urna sed lacus ullamcorper

malesuada. Pellentesque ac ligula diam. Pellentesque eu est lorem. Donec

arcu nunc, fringilla sit amet vulputate vitae, feugiat at tellus. Nam

tincidunt dictum magna ac adipiscing.

Duis diam purus, imperdiet in auctor quis, ultrices eget odio. Cras

pellentesque elit tristique velit fringilla ornare. Ut blandit tellus

neque, at facilisis felis. Duis tortor massa, fermentum non molestie in,

suscipit non ipsum. Maecenas faucibus laoreet sapien, rutrum porta nunc

malesuada at. Morbi placerat faucibus tortor eget gravida. Maecenas quis

vestibulum massa. Phasellus a est urna, in imperdiet justo. Pellentesque

viverra justo eu lacus ornare sed malesuada lacus ornare. Phasellus ornare

elementum dui, sed pharetra risus placerat nec. Vivamus blandit sagittis

magna, nec faucibus nunc convallis et. Nunc vel consectetur leo.

Pellentesque non erat eget neque rutrum pellentesque. Nam eu libero leo.

Pellentesque mattis, diam in placerat sollicitudin, dolor diam tristique

nunc, quis accumsan sem turpis ac purus. Lorem ipsum dolor sit amet,

consectetur.

My program prints the following to STDOUT when run as **main lorem.txt**:

Cras: 2

Donec: 1

Duis: 4

Fusce: 1

In: 1

Lorem: 2

Maecenas: 2

Mauris: 1

Morbi: 1

Nam: 2

Nunc: 1

Pellentesque: 7

Phasellus: 2

Proin: 1

Sed: 1

Ut: 1

Vivamus: 1

a: 2

ac: 4

accumsan: 1

adipiscing: 2

aliquet: 1

amet: 5

ante: 2

arcu: 1

at: 3

auctor: 2

blandit: 3

commodo: 2

congue: 1

consectetur: 3

convallis: 2

dapibus: 1

diam: 4

dictum: 1

dolor: 5

dui: 1

eget: 3

elementum: 1

elit: 2

erat: 1

eros: 1

est: 2

et: 3

eu: 4

facilisis: 1

faucibus: 3

felis: 3

fermentum: 1

feugiat: 1

fringilla: 2

gravida: 3

id: 2

imperdiet: 3

in: 4

ipsum: 4

justo: 3

lacinia: 1

lacus: 3

laoreet: 2

leo: 3

libero: 1

ligula: 2

lorem: 1

magna: 2

malesuada: 3

massa: 2

mattis: 2

mauris: 1

metus: 2

mi: 2

molestie: 1

nec: 3

neque: 2

nibh: 2

nisi: 1

non: 4

nunc: 4

odio: 1

orci: 1

ornare: 4

pellentesque: 2

pharetra: 2

placerat: 4

porta: 1

purus: 2

quam: 1

quis: 4

risus: 2

rutrum: 2

sagittis: 1

sapien: 2

sed: 8

sem: 1

sit: 5

sollicitudin: 4

suscipit: 1

tellus: 3

tempor: 2

tempus: 1

tincidunt: 3

tortor: 3

tristique: 2

turpis: 1

ullamcorper: 1

ultrices: 1

urna: 3

vehicula: 1

vel: 3

velit: 1

venenatis: 1

vestibulum: 2

vitae: 1

viverra: 1

volutpat: 2

vulputate: 2