CPSC 1070
Lab Project
Oct. 2, 2019

This is a single day project to be completed in lab on Wednesday. If you have not finished by the end of lab on Wednesday, the TA will grade you on what you have completed.

From the lab schedule page, please download the file `veggies.zip`, and unzip it. You should now have a directory named `veggies`. Use `cd` to go into this directory. You should find a `Makefile`, the program `reader.c`, and two text files named `veggieking.txt`, and `vegetables.txt`. First, use `less` to view the contents of `veggieking.txt` and `vegetables.txt`. Then, use `make` to compile the `reader` program. This is a starting program that will read the file whose name is specified on the command line. What it does is read each string in the file and clean it, removing any punctuation and making all characters lower case. It then prints out each cleaned string on a new line. Try running

```
reader veggieking.txt
```

to see what its output looks like.

Your job is to modify the program so that instead of printing out each string in the file, it counts the number of each of occurrence of the following vegetable names that are found in the file: `carrot`, `potato`, `spinach`, `cauliflower`, `broccoli`, `eggplant`. The program should read the input file, and then print out how many of each of these vegetable names occur in the file. For example, a run and its output might look something like this:

```
reader anotherfile.txt
1 carrot
0 potato
4 spinach
2 cauliflower
5 broccoli
3 eggplant
```

Run your program on `veggieking.txt` to see if it works correctly. Then run it again on `vegetables.txt` to make sure that it works for any input filename.

Once you are sure your program is correct, have the TA check you out.