BCS 230 Lab3

CRN 23798, 23322, 20108 Spring 2015

Instructor: Dr. Jie Li

Objective: To learn to declare, initialize, and process character arrays (C-strings)

Task:

a. Create a txt file `lab3data.txt` that contains the following sentences.

*Debugging is twice as hard as writing the code in the first place. Therefore, if you write the code as cleverly as possible, you are, by definition, not smart enough to debug it. - Brian W. Kernighan **

b. In the function `main`, create a c-string (character array) `quote` of 300 elements. Read the above text from the input file to initialize `quote`.

Note,

- `cin.get(quote, m, '*')` reads the next `m-1` characters from the standard input stream or reads until delimiting character '*' is encountered, and stores them into `quote`.
- `cin.get(quote, m)` reads the next m-1 characters from the standard input stream or reads until the end of line character and stores them into `quote`.
- Use `strlen` to get the actual number of characters in the c-string `quote`.

c. Write the definition of the function `countLetter` that returns the number of times a letter appears in a string. The function `countLetter` has two formal parameters: a character array `arr` and a character variable `letter`.

d. In function `main`, print c-string `quote` after reading from the file and print the number of times letter 'e' appears in the `quote`, i.e, call function `countLetter` using `quote` and `'e'` as actual parameters.