project[4]: loops/character handling functions

Due Thursday, 2/25/2016, 12:59:59pm

Project Goals

The goals of this project are to:

- 1. Get you familiar with loops and the getchar function
- 2. Help study for midterm[0]

Important Notes:

- 1. Formatting: Make sure that you follow the precise recommendations for the output content and formatting: for example, do not change the text in the problem from "Capitalized sentence:" to "The sentence in capital letters:". Your assignment will be auto-graded and any change in formatting will result in a loss in the grade.
- **2. Comments:** Header comments are required on all files and recommended for the rest of the course. Points will be deducted if no header comments are included.

Problem 1

Write a program that asks the user to enter a sentence terminated by a `.', a `?' or a `!' and then it outputs the following:

- 1. The same sentence capitalized
- 2. The number of words in the sentence

The program should function as follows (items underlined are to be entered by the user):

```
Enter a sentence ended by a `.', a `?' or a `!': <u>Do you like ice cream?</u>
Capitalized sentence: DO YOU LIKE ICE CREAM?
Total number of words: 5
```

Constraints: your program should use the getchar function to read from the terminal. Save your program in a file called sentence.c.

Challenge for problem 1: Your program should also output the length of the longest word in the sentence. Therefore, in addition to the output above, your program should also output:

```
Length of the longest word: 5
```

Save your program in a file called sentence challenge.c.

Submission details

The project needs to be submitted by Thursday, 2/25/2016, 12:59:59pm.

To submit your project, you will have to save your project files to an ECC machine using the Linux VM or the nomachine client:

- create a directory called "project4"
- save your *.c files in that directory
- save your description file into that directory
- DO THIS ONCE: Install the submission script (don't type the '>' symbols)
 > cd ~
 - > wget http://www.cse.unr.edu/~newellz2/submit
 - > chmod +x ./submit
- TO Submit:
 - > cd project4
 - > ~/submit

The submission script copies all files in the current directory to our directory. You may submit as many times as you like before the deadline, we only keep the last submission.

Academic Honesty

Academic dishonesty is against university as well as the system community standards. Academic dishonesty includes, but is not limited to, the following:

Plagiarism: defined as submitting the language, ideas, thoughts or work of another as one's own; or assisting in the act of plagiarism by allowing one's work to be used in this fashion.

Cheating: defined as (1) obtaining or providing unauthorized information during an examination through verbal, visual or unauthorized use of books, notes, text and other materials; (2) obtaining or providing information concerning all or part of an examination prior to that examination; (3) taking an examination for another student, or arranging for another person to take an exam in one's place; (4) altering or changing

test answers after submittal for grading, grades after grades have been awarded, or other academic records once these are official.

Cheating, plagiarism or otherwise obtaining grades under false pretenses" constitute academic dishonesty according to the code of this university. Academic dishonesty will not be tolerated and penalties can include canceling a student's enrollment without a grade, giving an F for the course, or for the assignment. For more details, see the University of Nevada, Reno General Catalog.