

CSCD 240

For this lab you will write a simple string parser that will display the number of words in the string and the length of the longest string.

I have provided an unchangeable tester.

The program flow is as follows. When the program starts, the user is required to enter a string. You are guaranteed the user will enter at least one letter. The user can ultimately enter up to 25 words in the string with each word being a maximum of 24 characters.

Once the first string is entered, the user is prompted to select from a menu of choices. The choices are:

- 1) Enter a new string
- 2) Print string statistics
- 3) Quit

Enter a new string - allows the user to replace the current string

Print string statistics – displays the count of words in the string and the length of the maximum word

NOTE: the string remains the same until the user selects #1

Helpful Stuff (Technical Term)

- Since the string will contain spaces, you must use fgets.
- Since you are entering numbers don't forget to strip the carriage return after you enter a number.
- You must use strcpy and strtok and strlen.
- Since you are using fgets, the carriage return will be apart of the string, you must deal with this.
- You will create a basic makefile – target lab14
- There is no dynamic allocation in this lab it is all about tokenizing a string

To Turn In:

A zip that only contains:

- cscd240_s13_lab14Tester.c
- lab14.h
- lab14.c
- makefile
- an output run named cscd240_s13_lab14Out.txt

You better know the name of the zip file by now. (Example: steinerslab14.zip)

Sample Output

Please enter a string --> Now is the time for all good men

Please select from the following

- 1) Enter a new string
- 2) Print string statistics
- 3) Quit

Choice --> 2

There were 8 words in the string

The longest word was 4 letters in size

Please select from the following

- 1) Enter a new string
- 2) Print string statistics
- 3) Quit

Choice --> 4

Please select from the following

- 1) Enter a new string
- 2) Print string statistics
- 3) Quit

Choice --> 1

Please enter a string --> to come to the aid of their university

Please select from the following

- 1) Enter a new string
- 2) Print string statistics
- 3) Quit

Choice --> 2

There were 8 words in the string

The longest word was 10 letters in size

Please select from the following

- 1) Enter a new string
- 2) Print string statistics
- 3) Quit

Choice --> 1

Please enter a string --> the quick brown fox jumped over the lazy dog

Please select from the following

- 1) Enter a new string
- 2) Print string statistics
- 3) Quit

Choice --> 2

There were 9 words in the string

The longest word was 6 letters in size

Please select from the following

- 1) Enter a new string
- 2) Print string statistics
- 3) Quit

Choice --> 2

There were 9 words in the string

The longest word was 6 letters in size

Please select from the following

- 1) Enter a new string
- 2) Print string statistics
- 3) Quit

Choice --> 1

Please enter a string --> I

Please select from the following

- 1) Enter a new string
- 2) Print string statistics
- 3) Quit

Choice --> 2

There was 1 word in the string

The longest word was 1 letter in size

Please select from the following

- 1) Enter a new string
- 2) Print string statistics
- 3) Quit

Choice --> 3