



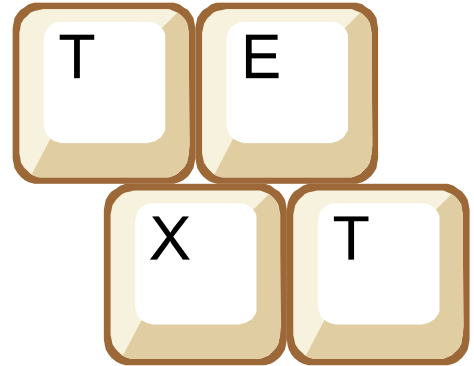
Overview

Going to the doctor can be a nervous experience. ...even if it's Dr. S!

Often doctors allow patients to contact them using e-mail. The Internet allows you to ask your doctor questions from any location. Of course, a doctor's life is busy, so they read tons of e-mails every day. Ah, yes, the Internet is great!

However, there are some rules on the Internet (and e-mail) that people tend to follow. This "Netiquette" is an important set of rules so we are polite and kind to others.

One of the rules is: DON'T WRITE IN ALL CAPS!



Your Task

Your program will take a string – read from the keyboard – and output in all lower caps. Essentially, you are going to store the string in memory and then convert it to lower case.

Your solution doesn't to look exactly like the example below. But, make sure to fulfill all the requirements. You can use this output to test if your program is correct. The user's input is in **blue**.

```
Please enter a text message
This is SHOUTING! HOW RUDE!

Fixed sentence is:
this is shouting! how rude!
```

But wait... there's more!

You need to create your subroutine to accomplish this. What way, your carefully written code can be used in a future project. You can call your subroutine whatever you want – just use a good name.

The caller should put the address of the string (memory buffer) into a register and your subroutine should handle the rest. Make sure to read on how to use the LengthCString to see how get the size of the text. The null-character '\0' is there for a reason.

It might be a good idea to save and restore registers. But, do this at the very end.

Tips

- Like all labs, **build it in pieces**. First get a single If-Statement to work. Then, you can work on the more detailed ones.
- All labels **must** be unique. Choose your names well.
- Read each character in the string. Use an 8-bit register!
- Check if it is a capital. If so, convert it to lower case. Look at an ASCII Chart.
- Get everything working before trying to save/restore registers

Requirements

You must think of a solution on your own. The requirements are as follows:

1. Prompt the user to enter a string
2. Scan it from the keyboard using the library call.
3. Convert it to lowercase
4. Display the sentence to the screen with a prompt.
5. Write a subroutine to handle your code.

Submitting Your Lab

Run Alpine by typing the following and, then, enter your username and password.

`alpine`

To submit your lab, send the source file (not a.out or the object file) to:

`dcook@csus.edu`



**Please, don't
e-mail me on
vacation!**