Computer Science 210 - Computer Organization

Homework Exercise 6

Due on Github 11:59 PM Wednesday 9 March

Your turn in will consist of one assembly language source file named strings.asm.

Develop pseudocode algorithms for your program components *before* you write any assembly language code, and **retain your pseudocode in your program file**.

Develop the program in two steps:

1. The program prompts you for your name and accepts it as input. The program then displays your name back to you. Here is an example run of the program:

Please enter your name: Cody Watson Thank you, Cody Watson!

Some systems recognize the enter or return key as a CR character (ASCII 13), while others recognize it as an LF (ASCII 10). Your program should run correctly on any system, so your input should stop when the input character is either one of these values. Note that the string you save should not include this character.

Be sure that you terminate your string with a null character after it is input. Also, you should place an upper bound on the number of characters that are allowed in an input string, leaving room for the null character, of course. When that bound is reached, you should stop the input process and continue to the next step. Use a separate variable, named **SIZE**, that has a **.FILL** value for this limit.

2. Now add code to the program to convert the lowercase letters in the string to uppercase letters and display the result. Here is an example run of the program:

Please enter your name: Cody Watson Thank you, Cody Watson! Your name in uppercase is CODY WATSON