40 pts

Name: _____

Class Day / Time: _____

Due Date: _____

Lab #7 – Assembly - Reversing a String

In this lab you will write an x86-assembly program to implement an assembly **procedure** to reverse a string using the stack method. You can use the code presented in class as the basis for your procedure. The procedure should access the string using indirect addressing.

The program will execute the following steps in the main assembly program:

1) You will input a string from the console and store it in memory. Label the memory location for the string as *inputStr*. Your program should accept a string up to 50 characters in length.
2) Call the assembly procedure that will reverse the string. Call the produce *reverseStr*. You will need to determine how and which parameters to pass to the procedure and whether any return value is needed. Please ensure that the procedure **do not** reference directly any memory location in your main program.
3) Once the procedure returns to the main program, output the resulting string to the console.

Implement your program; test it a number of times with different data. You program will need to include documentation for the main program and procedure. You will need to turn in **two** test runs for your program:

a. using small string (less than 20 characters)
b. using larger string (over 30 characters)

Turn in (STAPLED IN THIS ORDER)

1. The **FIRST PAGE** of this lab as a coversheet
2. The listing of **.asm source code** properly documented and the listing of **.mak file**
3. The **two** output from the program, either pasted into .asm source code or using print screen