CSc 21100 (Fall 2019)
Project 01: Assembly
(20 points)

IMPORTANT!

Please follow the **submission guidelines** below or your submission will be rejected.

1. You are expected to submit both a lab report and the source files (in a single zip file) to Blackboard in a single submission attempt.
2. The name of the lab report must be "FirstName_LastName_Project_**XX**_MM**Y**.pdf"*. Note that your report must be a PDF file.
3. The name of the zip file must be "FirstName_LastName_Project_**XX**_MM**Y**.zip"*.

*Replace "XX" with the actual lab number (2 digits). Replace "Y" with the section number.

In this lab, the students are expected to learn the basics of x86 assembly language, e.g. the use of x86 instructions, registers, loop, conditional instructions, system calls, etc.

Task 1

Try the "hello world" example we learned in class, but instead print out your name, student ID and section number.

Deliverables:

1. Successfully implement the program which can generate the correct outputs. (4 points)
2. In your report, include your source code, comment/explain each line of the code, and explain how to assemble, link and run the code. (2 points)
3. In the zip file, include your source code file, comment each line of the code. (2 points)
4. In your report, include a screenshot of the program outcome. (2 points)

Task 2

Note that in the “hello world” program, one has to explicitly specify the length of the string for it to be properly printed out. In this task, you are expected to create a function called ***strlen*** to count the length of the string. Then you call that function from the main program to get the string length so that there is no need to explicitly specify the length of the string.

With the new version, to print out a different message, only the string needs to be modified, nothing else to update anywhere in the program.

Deliverables:

1. Successfully implement the program which can generate the correct outputs. (3 points)
2. Follow proper function calling conventions. (4 points)
3. In your report, include your source code, comment/explain each line of the code, and explain how to assemble, link and run the code. (1 points)
4. In the zip file, include your source code file, comment each line of the code. (1 points)
5. In your report, include a screenshot of the program outcome. (1 points)