CSE 2312 Computer Organization & Assembly Language Programming

1ST Program Assignment

(Please read the instruction for program assignment in details and carefully follow them to finish the following program assignment)

Objectives: The objective of this program assignment is to make students practice

- 1- Correctly install and access Tanenbaum assembler, tracer and simulator
- 2- Play the HlloWrld.s program
- 3- Making your program correspondingly
- 4- Do simple arithmetic computations in Tanenbaum assembler
- 5- Do format output in Tanenbaum assermbler

Assignments:

- 1. Play the HlloWrld.s program step by step and check the values in different registers
- 2. Making your first program by change the "World" in "Hello World" with your full name.
- 3. Make one modification to the program by adding another instruction to print out your UTA ID number. Your number should stay in a different row.
- 4. Followed by the previous version, initialize AX and BX with 2049 and 4096 respectively.
- 5. Compute $AX \leftarrow AX + BX$
- 6. Print out the values of AX, BX, DX in one row, which is separated with the comma. **Example:**

If the values of AX, BX and DX are 1, 2, 3 respectively, output should be "**AX=1**, **BX=2**, **DX=3**"

The final output of the whole program should looks like:

Hello, John Doe

1000223333

AX=1, BX=2, DX=3

Requirements:

1. Please carefully follow the instruction for program assignments to do your assignment.

- 2. That means that, for each work session on the assignment, make a detailed entry of you activities in the journal on BlackBoard, which is provided as part of this assignment. Note that entries must be made contemporaneously, not delayed until the end of the assignments.
- 3. When you complete the assignments, submit the source files only to the Assignment for this lab. Write a one-page post report of your lab, and save that text as the last entry in your journal.