Homework 3

Revision **0**

Instructions

*Note: Late HW is **not** accepted! Put your **"last name, first name," the course number (3744), and the HW number** in the **top right hand corner** of the first page of **all** HW assignments. Also for **all** homework, use file name **`HWx.pdf`**, where x is replaced by the homework number, e.g., **`HW3.pdf for homework 3`**. Do **NOT** put your social security number or your UF ID number on your HW. Include **all** program listings (if any), i.e., list files. When possible, **verify** your program solutions with the simulator.*

M & M Problems: 6.1, 6.2, 6.11, 6.12, 6.15, 6.16, 6.23 (for problem 6.23, also write the main routine to test this subroutine; print out a screenshot of the program with the result shown in a memory window; also include the asm file in your pdf submission).

Stack: Assume that the stack pointer is appropriately initialized. Push a 0x37, 0xAB, 0xEF12 onto the stack, call a subroutine. In the subroutine, push 0x1C onto the stack, and then return from subroutine. Show the stack growing and shrinking with each described step. What address do you return to with the described scenario? Predict the outcome (i.e., make a table) and then **TRY IT**, i.e., run this code by single stepping through it. Include a screen shot of your code that also shows the stack (in a memory window) after the return from subroutine. Also include the complete asm file in your pdf submission.