**Week 3 Work**

Map your initials to letters of the alphabet e.g. A=1, B=2, C=3 etc. Write a MIPS program that

loads a value from memory location 0 into the register mapping to your first initial (value A)

loads a value from memory location 1 into the register mapping to your last initial (value B)

unless your first and last initial are the same, in which case, your first initial should map to the previous register and your last initial should map to the final register, e.g. if your initial were B, then you would load into registers 1 and 3 instead of 2

adds the values in the two registers (A and B) and stores them into a register of your choice

stores the sum back into memory location 2

subtracts the value of B from A and stores in a register of your choice

store the difference back into memory location 3

ands the two values A and B in registers and stores the result in a register of your choice

store the and’ed value back into memory location 4

ors the two values (A and B) in registers and stores the result in a register of your choice

store the or’ed value back into memory location 5

jumps to memory location 0 to repeat the program

After writing this program, hand assemble it using your knowledge of MIPS, and then convert it to hex. Save a copy of this somewhere in addition to the copy you turn in. You will be using the program to test your computer.