COE 205, Term 032 Computer Organization & Assembly Programming

Quiz# 4

Date: Sunday, April 11, 2004

Q1. Write an assembly program to change the content of register AL by resetting the least significant two bits (i.e., bits AL1 and AL0), setting the two most significant bits (i.e., bits AL7 and AL6), and complementing all the other bits (i.e., bits AL5, AL4, AL3 and AL2). For example, suppose that AL=00011110, your code should change the content of AL to 111000000.

Q2. Write an assembly program to multiply the <u>signed</u> content of register AL by **49.75** based on shift and addition/subtraction instructions using the smallest number of instructions possible. Assume that you can use Pentium instructions.