

Name:

Id#

COE 205, Term 012

**Computer Organization & Assembly Programming
Quiz# 5**

(Take Home)

Due date: Tuesday, May 15

Write an 8086 assembly program to implement a stop watch program. The program should do the following:

- (i) Ask the user to enter the stop watch time in the format mm:ss. If the user does not enter the time in this format, display an error message and ask him to reenter the time gain.
- (ii) The program decrements the time every second and displays it. Use INT 1CH to decrement the time and display it. Note that INT 1CH gets called by INT 8, which is initiated by the timer, 18.2 times per second. You need to write the interrupt service routine for INT 1CH and load its address in the interrupt vector table. You can use the procedure SETUP_INT, given in the book, to do that.
- (iii) The program terminates when the user presses any key in the keyboard.

Make sure that your program is well documented. Provide a hard copy of the program and a soft copy stored in a floppy.