

Name:

Id#

COE 205, Term 022

**Computer Organization & Assembly Programming
Programming Assignment# 4**

Due date: Tuesday, May 13

You are required to write an 8086 assembly program to do the following:

- (i) Ask the user to enter a string and read the string and store it in string1.
- (ii) Ask the user to enter a character, count the number of times the character occurs in the string and print the count.
- (iii) Print the string in reverse.
- (iv) Sort the characters in the string in alphabetical order and print the sorted string.
- (v) Ask the user to enter another string, string2, and check if the string2 is contained in string1 or not.

Make sure that your program is well documented. Use string instructions, macros and procedures where applicable to make your program well structured. Provide a hard copy of the program and a soft copy of both the assembly code and the executable stored in a floppy disk.