CMPE 310   **Assembly Language Project 3**

Assembly Project 3 for CMPE 310

Assigned: Friday, September 27

Due: Friday, October 04

Project Description:
Write an 80x86 assembly program that performs the following functions:
- **Reads a set of integers from a file into a memory array**. **The data file name is to be read from the command line**. You are welcome to use the code examples and macros to do this project.
- Format of the data file: **Assume the file gives the number of data points on the first line**. **Every line following the first line contains exactly one value. The maximum number of integers in the file will be 1000**.
- **Add all the integers that you have read and print out the sum on the screen as well as all the integers sorted in an descending order**.

You must use the submit program to submit your code. The class name is **CMPE_310** and the project name is **proj3**. You are also required to turn in a **single-file pdf report**. Make sure your code is **modular** i.e. you have **subroutines** for opening the file, **reading integers and populating your array, doing your calculations, printing your output etc.** Submit the project (project3.asm) file and (common_code.asm). Any code that you use from our examples should be in (common_code.asm) and this file should be included in your main project file. If you use the include file mine.inc, include that as a separate file.

You can construct your own data files for this in the format described above. **We will test your code on our own examples**

NOTE: You may use the C library functions for this project. The relevant functions are fopen, fscanf and printf. Examples are posted on the webpage.

THE LABS ARE INDIVIDUAL EFFORTS: INSTANCES OF CHEATING WILL RESULT IN YOU FAILING THE COURSE.