Assembly Project 2 for CMPE 310

Assigned: Friday, Feb 24

Due: Monday, Mar 5

Project Description:
Write an 80x86 assembly program that performs the following functions:
- Reads a set of integers from a file into an 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 the greatest and the smallest integer in your array.

You must use the submit program to submit your code. The class name is cmpe310 and the project name is proj2. You are also required to turn in a hardcopy. Follow all the instructions given in project 1 section Turning in your project. 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. The breakdown of the points will also be similar as project 1. Submit the project (project2.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. Properly format your code using the enscript command before printing out the hardcopy.

You can construct your own data files for this in the format described above. We will test your code on our own examples. Both the program and hardcopy are due at the beginning of class on Monday.

NOTE: You may use the C library functions for this project. The relevant functions are fopen, fscanf and printf. You will need to use gcc to link your source code if you use the C library functions.

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