CS322- Lab 3

Assembly language Programming

The goal of this is to familiarize the students with x86 assembly language features.

Part 1 : 16 bit Assembly language programming

In this section we set up an emulator to run 16 bit assembly

 Step1: install: DOSBox
Unzip the 8086.zip file and store in C drive. (that is C:\8086)
First, run dosbox.exe,   You have to basically set that as new directory just for DOSBox.
Essentially, it's going to become the C:\> drive of 8086 . So, type:

Z:\>MOUNT C C:\8086
Drive C mounted as local directory C:\8086

Next->
Change drive to C (C:)

Now have to compile the program.
>masm **Yourfilename.asm**
> l**ink Yourfilename.obj**
>debug Yourfilename.exe

Exercise 1:

>masm **avr.asm**
> l**ink avr.obj**
>debug avr.exe

Your assignment:

P1_0:

Study the debug tutorial and write a short report on important commands.

P1_1:
Write an assembly language program to find sum of 10 random numbers.

P1_2:
 Write an assembly language program to find average of the given set of 16 bit number numbers.

P1_3:
Write a program to find largest and smallest among an array of numbers and print the difference between them.

P1_4

Select six small problems of your own and write three assembly language programs to solve them. (submit   P1_4a.asm, P1_4b.asm, P1_4c.asm, P1_4d.asm, and P1_4e.asm,; include problem at the beginning of the asm file as comment statements   and comment each instruction)

Your Lab Assignment 3 (100 points)
Submission (single zip file with all programs in doc/pdf with source files P*.asm:

https://u.pcloud.com/#page=puplink&code=8Ld7Zm7F5AhonbiJSD2JYW6Xzjym2n9hV

. **Due on** 15th September 5 PM**.**