

CECS 130-02**Spring 2017****Lab 4****Lab Assignment due between 2:30 - 4:00 pm Thursday, February 9, 2017**

Please and follow the instructions below very carefully

Demos (To be done by lab Instructors):

1. Create a program that uses a do loop to calculate the average of adding a range of consecutive integers
2. Create a program that uses a for loop to calculate n factorial by decrementing the loop index i.
3. Write a program that prompts the user for a sequence of characters (string) and then converts all vowels to upper case and consonants to lower case.

Lab Assignment (To be uploaded by the student prior to leaving the lab):

1. Write a program that
 1. prompts the user for an integer number n then calculates the factorial $1*2*3*...*n$by using a for loop and then by using a while statement

Home Assignment (To be uploaded by the student by 9:00 pm Friday Feb 17):

Homework problems will be posted by Dr. Imam on Thursday Feb 9.

A note about assignments and reports:

Your presentation in your reports and assignments reflects great deal about you, your understanding of the assignment and on how much this course means to you. I try very hard to look at the substance of the report but I will be lying if I said that presentation does not influence my judgment. It would be wise on your part to assume that this true in every course at school and in real life/work. I expect your reports to be well formed and conform to the following rules:

1. **First and above all, I will not accept any late assignments and I will not accept any assignments by email. All submissions must be via Blackboard and on time.**
2. All reports have to be submitted as a **PDF** report that contains:
 - 2.1. Title page with your name, assignment number and the day you are actually submitting this report (Not the assignment due date)
 - 2.2. A comprehensive set of snapshots showing the inputs submitted and outputs obtained in the case of a successful output or a failure.
3. A C/CPP source code file for each programming problem and each must be named problem_n.cpp where nn is the problem number.
4. Make sure that you include as a comment at the top of your file your name and section:

As an example:

```
/* **** */
/* John Q. Public      */
/* CECS 130-11         */
/* Assignment 35        */
/* **** */
```

Failure to do this will cost you points.

5. Please zip both the PDF document with the source code files in one zip files that must be named as lastName_firstName_nn.zip where nn is the assignment number, e.g. my zip file for assignment 3 should be called "imam_ibrahim_03.zip".
6. Please do not submit your eclipse or bloodshed project or any IDE project that you may be using. I will be compiling and testing your source code from the text file in part 2 above to test running your applications and to verify that they run.
7. If you do not follow the instructions above I will not grade your homework and you will get a grade of 0 (zero)