24-780 Engineering Computation Problem Set 01

You need to create a ZIP file (It may appear as a compressed folder in Windows) and submit the ZIP file via the 24-780 on CMU Canvas. The name of the ZIP file must be:

PS01-YourAndrewID.zip

For example, if your Andrew account is *hummingbird@andrew.cmu.edu*, the file name must be:

PS01-hummingbird.zip

If your ZIP file does not comply with this naming rule, you will automatically lose 5% credit from this assignment. If we are not able to identify who submitted the file, you will lose another 5% credit. If we finally are not able to connect you and the submitted ZIP file, you will receive 0 point for this assignment. Therefore, please make sure you strictly adhere to this naming rule before submitting a file.

The ZIP file needs to be submitted to the 24-780 on CMU Canvas. If you find a mistake in the previous submission, you can re-submit the ZIP file with no penalty as long as it is before the submission deadline.

Notice that the grade will be given to the final submission only. If you submit multiple files, the earlier version will be discarded. Therefore, if you re-submit a ZIP file, the ZIP file MUST include all the required files. Also, if your final version is submitted after the submission deadline, late-submission policy will be applied no matter how early your earlier version was submitted.

Make sure your program can be compiled with no error in one of the compiler servers. Don't wait until the last minute. Compiler servers may get very busy minutes before the submission deadline!

Submission Due: Please see Canvas.

PS1-1 Download and install Visual Studio or XCode.

Follow the instructions on the lecture note and install Visual Studio or XCode to your computer.

You do not have to submit anything for this assignment.

If you choose to use MacOSX to do assignments, make sure you download and install XCode from http://developer.apple.com/

PS1-2 Variation of the high-low game: Multiplication of three integers.

In this problem, you will write a C++ program that (1) shows the user three random integer numbers each of which ranges from 1 to 9, (2) lets the user calculate the multiplication of three numbers and type in the answer, and (3) if the answer is correct shows the number of seconds that the user has spent for the calculation, or if the answer is wrong shows the correct answer.

The console window must look like the following.

```
7x5x3=?> 105
Correct!  You spent 5 seconds to calculate.


5x4x7=?> 100
Wrong!  Correct answer is 140.
```

Write a C++ program (named ps1-2.cpp) and submit a Zip file that includes the source code (ps1-2.cpp) to the 24-780 on CMU Canvas.

If you prefer cin and cout, you don't have to use printf and scanf. That's your choice.

Make sure your program can be compiled with no error in one of the compiler servers. Don't wait until the last minute. Compiler servers may get very busy minutes before the submission deadline!