You may be asked to demonstrate/explain your work to the tutor, if you are absent/unavailable or fail to demonstrate properly, zero marks will be awarded.

Text book: Deitel, H M & Deitel, P J 2013, C: How to program, 7th edn, Pearson Prentice-Hall, Upper Saddle River, New Jersey.

Marks will be deducted (-0.25) if the submission format is not right.

Submission Format: Copy and paste the question and then write your answer. If it is a programming question copy and paste your code from text editor followed by the screenshots of the output window. Marks will be deducted if this format is not followed. You need to follow the exact sequential number as in the tut sheet. Submit a single file.

Week 11

1. Describe briefly the following terminologies/symbols.
    a. Class
    b. Object
    c. Member function
    d. Data member
    e. Access specifiers
    f. Class definition
    g. Encapsulations
    h. Inheritance
2. Modify Class GradeBook
    a. Include another string data member that represents the course lecturer's name.
    b. Provide a set function to change the lecturer's name and a get function to retrieve it.
    c. Modify the constructor to specify course name and lecturer's name parameters.
    d. Modify function displayMessage to output the welcome message and course name, and the string "This course is presented by: " followed by the lecturer's name
3. (a) Define a C++ base class named Rectangle containing length and width data members. From this class, derive a class named Box with another data member named depth. The member functions for the base class Rectangle should consist of a constructor and an area() function. The derived class Box should have a constructor, a volume() function and an override function named area() that returns the surface area of the box.

    (b) Include the classes written in part a, above in a working C++ program that creates an object for each class and calls each member function for each class to test them. Verify the results manually.