CS212-Object Oriented Programming (3+1)

Assignment No. 1
(CLO-2)

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Student Name:………….……………………….   Roll No:……………………………..……..

Section:……………………………………………

Instructions:

Assignment must be submitted in printed form as well as in soft form (on LMS). Plagiarism in assignment will lead to zero marks. Clearly mention your name, section & registration number on the assignment. _To get good marks you must use good programming practices & explain your solution through comments_.

Submission Date: 3rd March 2016

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Tasks:

1. Implement a class car. A car has a petrolLevel that indicates the level of petrol in the car. You are required to do the following:
   - Provide getter and setter for this data member.
   - Implement constructor with default argument and with an initializer list.
   - Supply a method **movecar()** that takes an integer as an argument and move the car to the argument value which is in Km. Provided the petrol tank is not empty otherwise displays an appropriate message. Moving for each km causes the petrolLevel to go low by one.
   - Write a method **refill** that refills the car tank to the maximum value of **petrolLevel**.
   - Supply a method **isEmpty** that tells whether the Petrol tank is Empty or not.
   - Write main program to test this functionality.

2. Create a class called Time that takes time in 24 hour format (create a constructor for this) and has a member function which converts it into 12 hour format (i.e. a.m. / p.m. format). Also create a display function which prints this output. Use getter and setter functions in your implementation. Also implement a destructor in your class.

3. Make a program using class/classes that can have student score information including:
   - 3 Assignments
   - 2 OHTs
   - 5 Quizzes
   - ESE

The program should ask user to enter total and obtained number for each item. You have seen how your final score of each subject is calculated i.e. 10% Assignments, 30% OHTs, 10% quizzes and 50% ESE. You have to calculate the average of each item if there is more than 1 value for that item. And calculate a final score out of 100. Use member functions for setting, getting values and other functions for calculations.

Deliverables

Submit hard copy of assignment in the class. For soft form submit folder of source code files on the given LMS link which contains all solved questions. Make sure your folder/files are named on your Name, Section & Reg. No. You must submit a source code file, not an exe or any other kind of file.

Always submit well before the deadline to avoid any last minute delays.