Assignments on Java/C# - I

Topics Covered: data types, operators, if else constructs

Assignment 1:
You are assigned to develop a module to calculate the electricity bill based on below conditions:
The standard price per unit is Rs. 1.20.
- If number of units are less than 100 then standard price per unit will be applied.
- If it is less than or equal to 300 units then Rs. 2 will be charged for number of units over and above 100 units.
- If it is greater 300 units then Rs. 2 will charged for additional 200 units above 100 units and Rs. 3 will be charged for additional units above 300.

Topics Covered: loops and arrays

Assignment 2:
As a developer, you are assigned to develop a module to generate innings statistics of a batsman. Assume the batsman has played 5 overs (30 balls). Generate random runs between 1 to 6 and calculate the below stats:
1. Total runs scored.
2. Number of 0s, 1s, 2s, 3s, 4s and 6s.
3. Strike Rate (runs per ball).

Assignment 3:
Extend the assignment 3, which fetch details for last 5 innings and calculate the following:
1. Average score of last 5 matches
2. Total runs
3. Number of 0s, 1s, 2s, 3s, 4s and 6s.
4. Average Strike Rate (runs per ball).

Topics covered: classes, objects, constructors, getter & setters.

Assignment 5:
As a developer, you are asked to create a module to store details of a bank account. You are asked to create a class Account with following fields:
- accountNo
- accountBalance
- accountPassword

In addition to above fields, declare a class variable "bankName" to be shared by all objects of the class.
For security reasons, above fields must not be directly accessed outside the class. You need to generate getter and setter methods to let other classes access or modify the object's details.

Write default and parameterized constructors to allow creation of object in flexible manner.

Write a member method called "displayAccount" in the Account class.
The "displayAccount" method which displays all the details of the account.

Define a main class with "main" where account object is created and call the display method
to display account details.