Enterprise Application Development
Homework 01

Instructions:

• Work on this Homework individually. Discussion is not allowed.

• Expected time to give to Each Question has been mentioned alongside the Question.

• Anyone caught being indulged in the act of plagiarism would be awarded F grade in this Subject

Task 01:   **10 Min**

Write a C# Sharp program to read temperature in centigrade and display a suitable message according to temperature state below: (Use switch Statement and do proper type checking and Exception handling)

        Temp < 0 then Freezing weather
        Temp 0-10 then Very Cold weather
        Temp 10-20 then Cold weather
        Temp 20-30 then Normal in Temp
        Temp 30-40 then Its Hot
        Temp >=40 then Its Very Hot

Task 02:   **20 Min**

Make a Simple Calculator Application in C# that performs Addition, Subtraction, Division, Multiplication and Modulus Operators on two Numbers. (Use of Switch Expression, proper Variable Types and Exception Handling is necessary for Full marks)

Task 03:   **15 Min**

Write a program that takes a floating-point number from user as input and then rounds off the number. Rounding the number should also be based on choice from user. Provide two methods of rounding, One with the banker's algorithm and the other one with the old method of rounding.

Task 04:   **10 Min**

Write A function in C# that takes two numbers as parameters from user and swaps them. (Method return type should be void).

Task 05:   **15 Min**

Write a class in C# that keeps counts of all its objects that are initialized during the execution of program. No variable outside the class should be responsible for maintaining count. Also, this count can not be changed by user himself but should only be modified by class.

Write a function that calculates GPA of a student for a semester based on marks given as parameter. Remember that number of Subjects can vary and your Function should handle it. (You can suppose that each subject has same credit hours)