**C# OOP Assignment:**

Prerequisite:

* Basic C# knowledge
* Four basic principles: Inheritance, Polymorphism, Encapsulation, Abstraction
* *Advance:* Static/non-static, override, overload, generic, collection

1. Create class Person (base abstract class), create four derived classes from Person: Teacher, Student, Plumber, Housekeeper. Create setter and getter methods for all properties. In main class, declare four derived classes with base class and instantiate with its constructor with full parameters.
   1. Person:
      1. Name: string
      2. DateOfBirth: DateTime
      3. Id: string
      4. Address: string
   2. Teacher:
      1. TeacherId: string
      2. SchoolName: string
   3. Student:
      1. StudentId: string
      2. SchoolName: string
   4. Plumber:
      1. EmployeeId: string
      2. CompanyName: string
   5. Housekeeper:
      1. EmployeeId: string
      2. CompanyName: string

Create GetAge method: return Age as integer from DateOfBirth property in base class. For each derived class, create PrintInfo method: Print out all properties. Advance: Override ToString() method to replace PrintInfo.

Questions:

* What is constructor?
* What are base class and derived class?
* What are getter and setter methods? Why do we need them?
* What is public, private, protected?
* What is Four basic principles: Inheritance, Polymorphism, Encapsulation, Abstraction?
* What is interface? What are use cases of interface?
* Interface vs Abstract class