

# American International University-Bangladesh (AIUB)

## Object Oriented Programming 2 (OOP2)

### Fall 2022-23

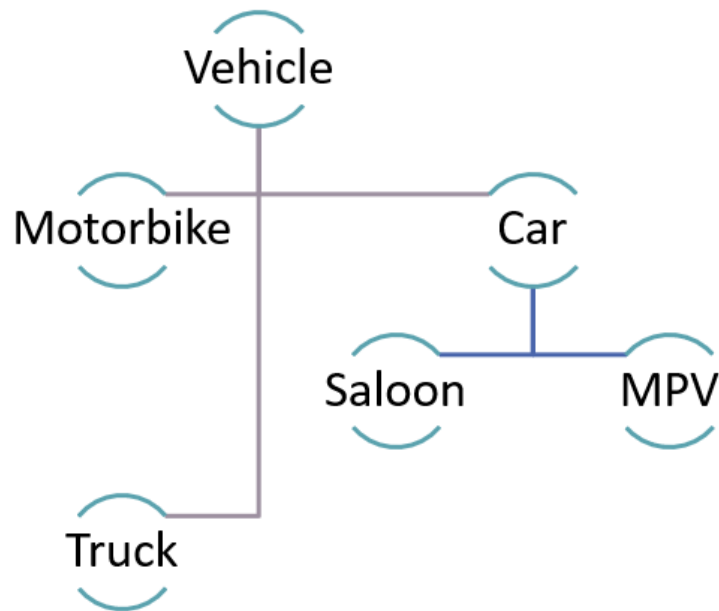
#### Mid-term Lab Tasks-03

Student must follow the *exact name of class, member variables, and functions*. And students must *maintain the rules for identifiers and naming conventions*. The *syntax alignment* has to be as it should be.

1. Develop the following C# classes.

Course	string courseName string courseCode int courseCredit	Member fields Declare private, use properties to access
	2 constructors <i>//empty and valued</i> void showCourseInfo()	Member function Declare public
Book	string bookName string bookAuthor string bookId string bookType int bookCopy <i>//how many copy</i>	Member fields Declare private, use properties to access
	static int bookCounter	Public member field
	2 constructors <i>//empty and valued</i> void showInfo() void addBookCopy(int x) <i>//how many copy of book</i>	Member function Declare public
Contact	string personName string personID int age string mobileNumber char gender <i>//M or F</i>	Member fields Declare private, use properties to access
	2 constructors <i>//empty and valued</i> void showPersonInfo() void detectMobileOperator() <i>//show GP, Robi etc</i>	Member function Declare public
<i>After developing constructors, you must print something there.</i>		

2. Look at the following diagram carefully, and develop the program using C#.



Vehicle	string vehicleName string vehicleId	Member fields Declare private, use properties to access
	static int vehicleCount	Public member field
	constructor //default void status() void showInfo()	Member function Declare public
Motorbike	constructor //default void status()	Member function Declare public
Truck		
Car		
Saloon		
MPV		
You must create object from vehicle, but call these five classes. Example- Vehicle obj1 = new Motorbike() Vehicle obj2 = new Truck() Vehicle obj3 = new MPV() .....		
After developing constructors and polymorphisms, you must print something there.		