Object Oriented Programming 2

Lab Task:

1. Develop C# classes

Note: Student must follow the exact name of class, member variables, and functions. And students should use fully qualified names for these, as well camel notions. And the syntax alignment has to be as it should be.

Develop classes:

Account	String accName String acid int balance	Member fields declare private use properties to access
	2 Constructor (Empty, valued)	
	Deposit(int amount)	
	Withdraw(int amount)	
Extended part		
	Transfer(int amount, Account receiver)	Transfer amount from one account to another account

5. OOP concept validation, such as encapsulation:

From these above examples students can realize the concept of encapsulation, which is achieved using class and access modifiers (will be explained details in inheritance).

Book	String bookName String bookAuthor String bookId String bookType int bookCopy // how many copy	Member fields declare private. use properties to access
	2 Constructor (Empty, valued) void ShowInfo() void AddBookCopy(int x)// how many copy of book	
	static int bookCounter static void showTotalBookInfo()	
Contact	String personName String personId int age String mobileNumber; Char gender // M or F	Member fields declare private. use properties to access
	2 Constructor // empty and valued void ShowPersonInfo() void DetectMobileOperator() // it will show GP or Robi etc.	

Course	String courseName String courseCode int courseCredit	Member fields declare private. use properties to access
	2 Constructor (Empty, valued)	Member Function Declare public
	ShowCourseInfo()	

Mobile	String mobileOwnerName String mobileNumber // SIM number String mobileBalance String mobileOSName boolean lock // true means phone is lock false means unlock	Member fields declare private. use properties to access
	2 constructor void ShowInfo() void Recharge(int amount) void CallSomeone(int timeDuration) // per minute cost=1 taka	Lock has to be false to show or recharge or call someone, so check the lock flag/Boolean variable

Library Reuse Book Class	String libName String libAddress Book [] listOfBook int totalBook;	Member fields declare private. use properties to access

	2 constructors (empty and valued)
	void ShowLibInfo() // show library info and all book info as well
	void AddNewBook(Book book) // add a new book into lib
	void DeleteBook(Book book) // delete book object
	void AddNewBookCopy(Book book, int copy)	

AddressBook Reuse Contact Class	String ownerName String info Contact [] listOfContact	Member fields declare private. use properties to access
	2 constructor (empty and valued) void ShowAllContactInfo() void AddContact(Contact con) void DeleteContact(Contact con)	