Object Oriented Programming

Lab 8 ()

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Faculty of Information Technology

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Lab Task 1

Create a base class **Card** with the following attributes

- Card number : private
- Owner name : public
- Expiry date : public

Derive the following classes from **Card**, with mentioned additional attributes

• **Calling card**(public inheritance)

- Amount : private
- Company name : private
- PIN : private

• **ID card**(public Inheritance)

- CNIC Number : private
- Age : private

• **Driving license card**(public Inheritance)

- Driving license type (heavy, light, bike) : private
- Issued in city : private

Your tasks:

1. In the derived classes, write the getters and setters of every member variable (including the derived variables). main() is required to add card of each type, and then to display their information. The object of the base class will not be instantiated.
2. According to the rules of inheritance, clearly specify (by adding comments in the derived classes) which of the members are inherited and clearly mention their access specifiers in the derived classes.

Lab Task 2

Write a class Book that has 3 attributes id, name & author. Create new class novel that inherits Book class. It has some additional attributes of publisher, price, published date, total copies. Display a complete set of information regarding Novel id, name, author, publisher, price, published date, total copies.

- You are required to set & display information for atleast 3 novels.

- In the end, calculate the total cost for each novel.
- Display information of a novel with a highest individual price.
- Display information of a novel with a maximum total cost.
- Display information of a novel with a maximum total cost.