Programming II

Comp 111

Spring 2020



Department of Computer Science

Forman Christian College University

Lab 9

Inheritance

|  |  |
| --- | --- |
| **Question #** | **Total Marks** |
| Question 1 | 5 |
| Question 2 | 5 |
| Question 3 | 5 |

# 

# 

# 

# **Lab Problem**

**Question 1:**

**Create a class Cards with the following attributes**

• Card number

• Owner name

• Owner address

• Expiry date

Derive the following classes from Cards, with mentioned additional attributes

• Calling card (Amount, Company name, PIN)

• ID card (Social security number, Age)

• Driving license card(Driving license type (heavy, light, bike),Issued in city)

Write a main() to add up some cards, and then to display their information.

**Question 2:**

The most common attributes of a person are the person’s first name and last name. The typical operations on a person’s name are to set the name and print the name. Implement the class named **PersonType** for the above functionality.

Design the class doctorType, inherited from the class personType, with an additional data member to store a doctor’s specialty. Add appropriate constructors and member functions to initialize, access, and manipulate the data members. Display the doctor complete data.

Design the class patientType, inherited from the class personType, with additional data members to store a patient’s ID, age, date of birth, attending physician’s name, the date when the patient was admitted in the hospital, and the date when the patient was discharged from the hospital. (**Composition:** Use the class dateType to store the date of birth, admit date, discharge date, and **Association:** the class doctorType to store the attending physician’s name.)

Add appropriate constructors and member functions to initialize, access, and manipulate the data members. Display the Patient complete data.