

Programming II

Comp 111
Spring 2020



Department of Computer Science
Forman Christian College University

Lab 12

Multilevel Inheritance

Question #	Total Marks
Question 1	5
Question 2	5

Lab Problem

Question 1: (Multilevel Inheritance)

Make a class `Employee` with a name and salary. Make a class `Manager` inherit from `Employee`. Add an instance variable, named `_department`, that stores a string. Supply a method `Display` that prints the manager's name, department, and salary. Make a class `Executive` inherit from `Manager`. Supply appropriate `Display` methods for all classes. Supply a test program that tests these classes and methods.

Question 2: (Abstract classe)

Create an abstract class `polygon` that has a method `getnoofsides()` and `getarea()` and it has three subclasses `triangle`, `rectangle` and `square` each with its own two methods `getnoofsides` and `getarea` and their respective implementations accordingly.

Question 2: (Abstract class and polymorphism)

Implement a super class `Account` which will have `accountTitle`, `currentBalance` as its attribute and a method `InterestRate()` and `getStatus()`. Also implements three sub classes `SBI`, `ICICI`, `AXIS` each having `InterestRate()` and `getStatus()`. The interest rate are 5, 6, and 8 % respectively for the three on the `currentBalance`. Provide a driver program that creates objects for the three subclasses in a list and displays information by calling `getStatus()` in loop.