



University of Central Punjab

Faculty of Information Technology

Object Oriented Programming

Lab 10	
Topic	Inheritance
Objective	The basic purpose of this lab is to revise the concept of inheritance.

Instructions:

- Indent your code.
- Comment your code.
- Use meaningful variable names.
- Plan your code carefully on a piece of paper before you implement it.
- Name of the program should be same as the task name. i.e. the first program should be Task_1.cpp

Students are required to work in multiple files i.e .h and .cpp

Task 1:

Create a class BankAccount and two additional classes (each derived from BankAccount) named SavingsAccount and CheckingAccount. The member attributes and functions for each class are given below.

BankAccount:

- title
- accountNumber
- balance
- deposit()
- withdraw()

SavingsAccount:

- interestRate
- calculateInterest()
- display()

CheckingAccount:

- fee (charged per transaction)
- display()

You will then test the operations of each class in your driver function to simulate the transactions of both the checking account and the savings account.

Task2:

Write a class LocalPhone that contains an attribute phone to a local telephone number. The class contains member functions to input and display phone number. Write a child class NatPhone for national phone numbers that inherits LocalPhone class. It additionally contains an attribute to store city code. It also contains member functions to input and show the city code.

Write another class IntPhone for international phone numbers that inherits NatPhone class. It additionally contains an attribute to store country code. It also contains member functions to input and show the country code.