1)Imagine a publishing Co. that markets both book and audio cassette version of its works. Create a class

Publication that stores the title(string) and price(float) of a publication. From here, derive two classes :

Book, which adds a page count(type int) and Tape which adds a playing time in minutes(float). Each of

these three classes should have a getData() function to get its data from the user at the keyboard, and a

putData() function to display its data.

2) Create a class X with a protected variable x. A public method setX() is present to initialize the variable.

Derive a class Y in public mode with a protected member variable y. A public method setY() is present to

initialize the variable. Derive a class Z again in public mode from Y having a protected member z and a

public method setZ(). Now write the main() to show the values of x, y and z from Z.

3)Create a class Base1 with a public method display() having a output message such as "We are in
Base1".

Derive a class Base2 with a public method display() with a similar message like "We are in Base2".

Now derive a class Derived in public way from both Base1 and Base2. Derived is also having a method

display() having a message like "We are in Derived". Now write a suitable main() so as to invoke the

display() methods of Base1 and Base2 one after another with an instance of Derived.

4)Refer to the assignment 1. Add a base class Sales that holds an array of three floats so that it can
record

the dollar sales of a particular publication for the last three months. Include a getData() function to get

three sales amounts from the user, and a putData() function to display the sales figures. Alter the Book

and Tape classes so they are derived from both publications and sales. An object of class Book or Tape

should input and output sales data along its other data. Write a main() function to create a book object

and a tape object and exercise input/output capabilities.

5)Assume that a bank maintains two kinds of accounts for customers, one called as savings account and

the other as current account. The savings account provides compound interest and withdrawal facilities

but no cheque book facility. The current account provides cheque book facility but no interest. Current

account holders should also maintain a minimum balance and if the balance falls below this level, a

service charge is imposed.

Create a class Account that stores customer name, account number and type of account. From this derive

the classes Cur_acct and Sav_acct to make them more specific to their requirements. Include necessary

member functions in order to achieve the following tasks:

(a) Accept deposit from a customer and update the

balance.

(b) Display the balance.

(c) Compute and deposit interest.

(d) Permit withdrawal and update the balance.

(e) Check for the minimum balance, impose penalty,

necessary, and update the balance.

Do not use any constructors. Use member functions to initialize the class members.

Consider the following class network. The class master derives information from both account and admin classes which in turn derive information from the class person. Define all the four classes and write a program to create, update and display the information contained in master objects.

```
person
-----------
name
code
```

```
account
-----------
pay
```

```
admin
-----------
experience
```

```
master
-----------
name
code
experience
pay
```