## Assignment 1

Complete the following program

```
#include <iostream>
using namespace std;

class Media
{
    //title char[50] and price float
    //parameterized constructor
    //virtual void display();
};

class Book : public Media{
    //pages int
    //parameterized constructor
    //override display
};

class Tape : public Media{
    //time float
    //parameterized constructor
    //override display
};

int main()
{
    //accept one entry of book details
    //create object of book - bookObj with all the details accepted from user

    //accept one entry of tape details
    //create object of tape with all the details entered. tapeObj
    Media *lst[2];
    //lst[0] = address of the bookObj
    //lst[1] = address of the tapeObj

    //display details
}
```

## Assignment 2

Create a base class called **shape.** Use this class to store two double type values that could be used to compute the area of figures. Derive two specific classes called **triangle** and **rectangle** from the base shape. Add to the base class , a member function get_data() to initialize base data members and another member function display_area() to compute and display the area of figures. Make display_area() a virtual function and redefine this function in the derived classes to suit their requirements.

Using these three classes design a program that will accept dimensions of a triangle or a rectabgle interactively and display area.

Note : the two values given as input will be treated as lengths of two sides in case of rectangle and base, height in case of triangles.

Area of rectangle =- x * y

Area of triangle = ½ * x * y

## Assignment 3

Extend the above program to display area of circles.

Note : Circle needs only one value- radius to calculate area. But the get_data() of the base class needs two values to be passed.