

## **Lab-9**

### **Topic: Dynamic Binding (Virtual Functions)**

- i. Create a class shape. Derive three classes from it; Circle, Square and Triangle. Find area of each shape and display it, using virtual function.
- ii. Create a class which stores employee name, id and salary. Derive two classes from 'Employee' class: 'Regular' and 'Part-Time'. The 'Regular' class stores DA, HRA and basic salary. The 'Part-Time' class stores the number of hours and pay per hour. Calculate the salary of a regular employee and a part-time employee, using virtual function.
- iii. Create a class which stores account number, customer name and balance. Derive two classes from 'Account' class: 'Savings' and 'Current'. The 'Savings' class stores minimum balance. The 'Current' class stores the over-due amount. Include member functions in the appropriate class for
  - deposit money
  - withdraw [For saving account minimum balance should be checked.]
  - [For current account overdue amount should be calculated.]
  - display balanceDisplay data from each class using virtual function.
- iv. WAP to demonstrate use of pure virtual function and abstract base class. [May use the number class as base and hexadecimal, octal and decimal as derived classes]
- v. Also do the media class as base class and book and tape as derived class program too, as discussed in the theory class.