

**Everest Engineering College  
Sanepa-2, Lalitpur**

**Date of distribution:.....**

**Date of submission:.....**

**Subject: Object Oriented Programming in C++**

**Lab-8**

**Title: Constructor in Inheritance**

**Objective:**

To be familiar with use of constructor in inheritance

To understand about working mechanism of constructor and destructor in inheritance

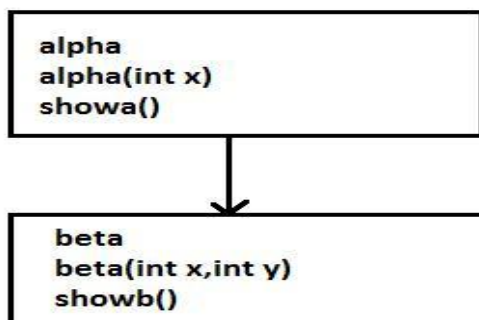
**Theory:**

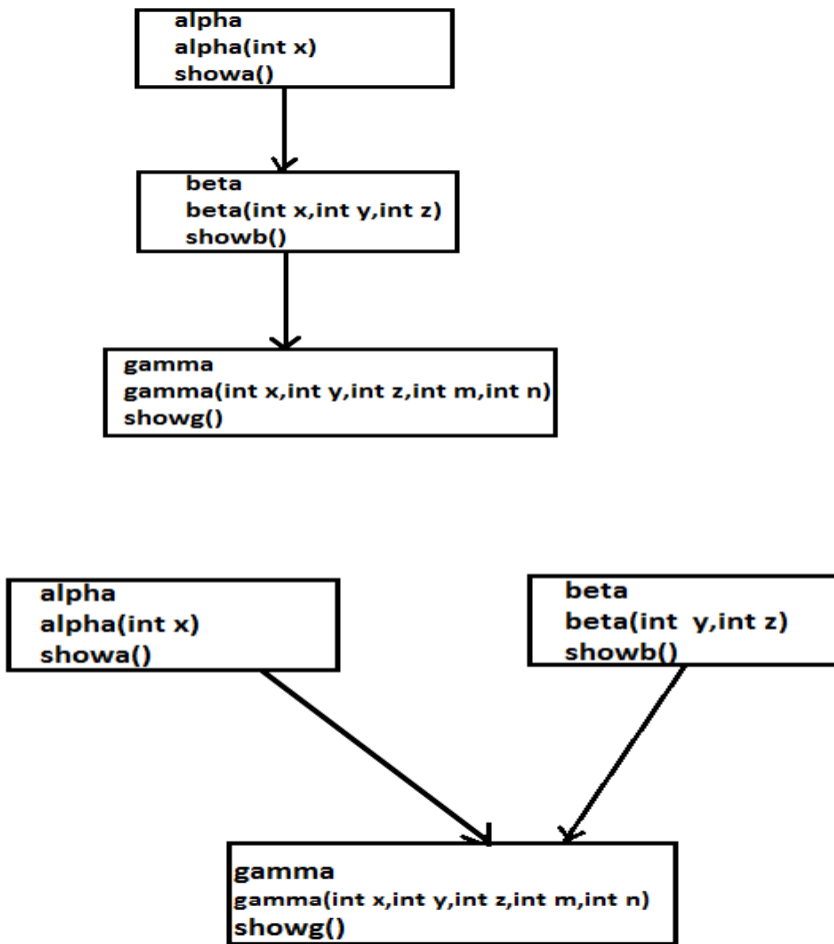
Constructor and destructor in inheritance

Argument passing mechanism for supplying initial values to the bases  
classes constructors

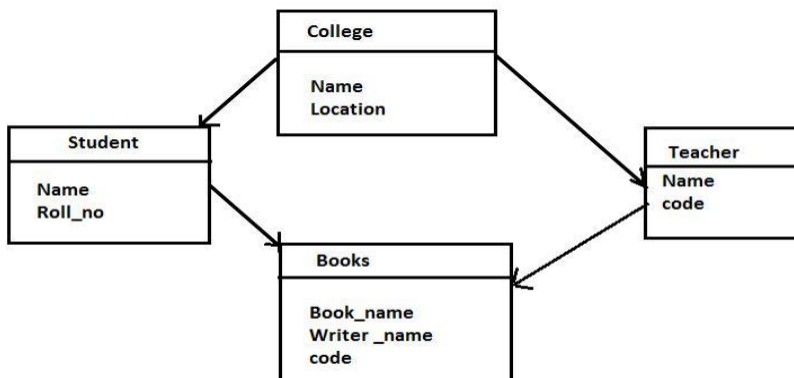
**Lab exercises (please code yourself and show the output to instructor)**

1. Write a complete program with reference to given below.





2. The following figure shows the minimum information required for each class. Write a program to realize the above program with necessary member functions to create the database and retrieve individual information. Every class should contain at least one constructor and should be inherited to other classes as well.



3. Create a class person with data members name, age and address. Create another class teacher with data members Qualification and department .Also create another class Student with data members program and semester. Both class are inherited from class person. Every class has at least one constructor which uses base class constructor. Create member function showdata() in each to display the information of the class member.

4. Create two classes Publication and Sales. The Publication class holds title and price and the Sales class holds the total monthly sales. Derive a class called Book from both Publication and Sales. The book class stores author's name and page count. Each of these three classes should have a function Display() to print the information of classes and should have at least one constructor that is inherited to derived class as well. Write a program to implement these classes.