Lab-7 Destructors and Inheritance

1. write a program in c++ to create a class Test having data members length and name as data members. Using default and dynamic constructors to allot memory for name dynamically.Use destructor to de-allocate memory to name using delete.Create an object dynamically using new and also delete the objects memory using delete.

2. Create a class student which stores name, roll number and age of a student. Derive a class test from student class, which stores marks in 5 subjects. Input and display the details of a student.

3. Extend the program 2. to derive a class from result from class 'test' which includes member function to calculate total marks and percentage of a student. Input the data for a student and display its total marks and percentage.

4.Create a class 'shape'. Derive three classes from it: Circle, Triangle and Rectangle.Include the relevant data members and functions in all the classes. Find the area of each shape and display it.

5. 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 par-time employee.