WEEK #5

LAB ASSIGNMENTS

1. Write a program in Java to define a class Rectangle having data member: length and breadth; to calculate the area and perimeter of the rectangle. Use constructors and member functions to read, calculate and display.

2. Write a program which will overload the area () method and display the area of a circle, triangle and square as per user choice and user entered dimensions.

3. A plastic manufacturer sells plastic in different shapes like 2D sheet and 3D box. The cost of sheet is Rs 40/ per square ft. and the cost of box is Rs 60/ per cubic ft. Implement it in Java to calculate the cost of plastic as per the dimensions given by the user where 3D inherits from 2D.

4. Write a program in java to define a class Shape which has data member “area” and a member function showArea(). Derive two classes Circle and Rectangle from Shape class. Add appropriate data members and member functions to calculate and display the area of Circle and Rectangle.

5. Write a program in java using inheritance to show how to call the base class parameterized constructors from the derived class using super. Consider the base class is “Shape2D” for rectangle and define subclass “Shape3D” for cube.