



WEEK #6

LAB ASSIGNMENTS

1. 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.
2. Illustrate the execution of constructors in multi-level inheritance with three Java classes – plate (length, width), box (length, width, height), wood box (length, width, height, thick)
3. Program creates a superclass called Shape that stores the dimensions of a two-dimensional object. It defines a method called area () that computes the area of an object. The program derives two subclasses from Shape. The first is Rectangle and the second is Triangle. Each of these subclasses overrides area () so that it returns the area of a rectangle and a triangle, respectively.
4. Implement Program 3 using Dynamic Method Dispatch.
5. Write a program in java using inheritance to show how to call the base class parameterized constructors from the derived class using super.