

## **Homework Assignment #8 due Tuesday Feb 13, 2018**

### **Inheritance**

#### **Program 1**

Create a class named Square that contains data fields for height, weight, and surfaceArea, and a method named computeSurfaceArea(). Create a child class named Cube. Cube contains an additional data field named depth, and a computeSurfaceArea() method that overrides the parent method. Write a program called DemoSquare that instantiates a Square object and a Cube object and displays the surface areas of the objects. Put all the programs in a package called com.Homework81.

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#### **Program2**

Write a program called CarRental that computes the cost of renting a car for a day based on the size of the car: economy, medium, or full-size. Include a constructor that requires the car size. Add a subclass called CarPhone to add the option of a car phone. Write a program called UseCarRentalAndPhone to use these classes. Put all the programs in a package called com.Homework82.