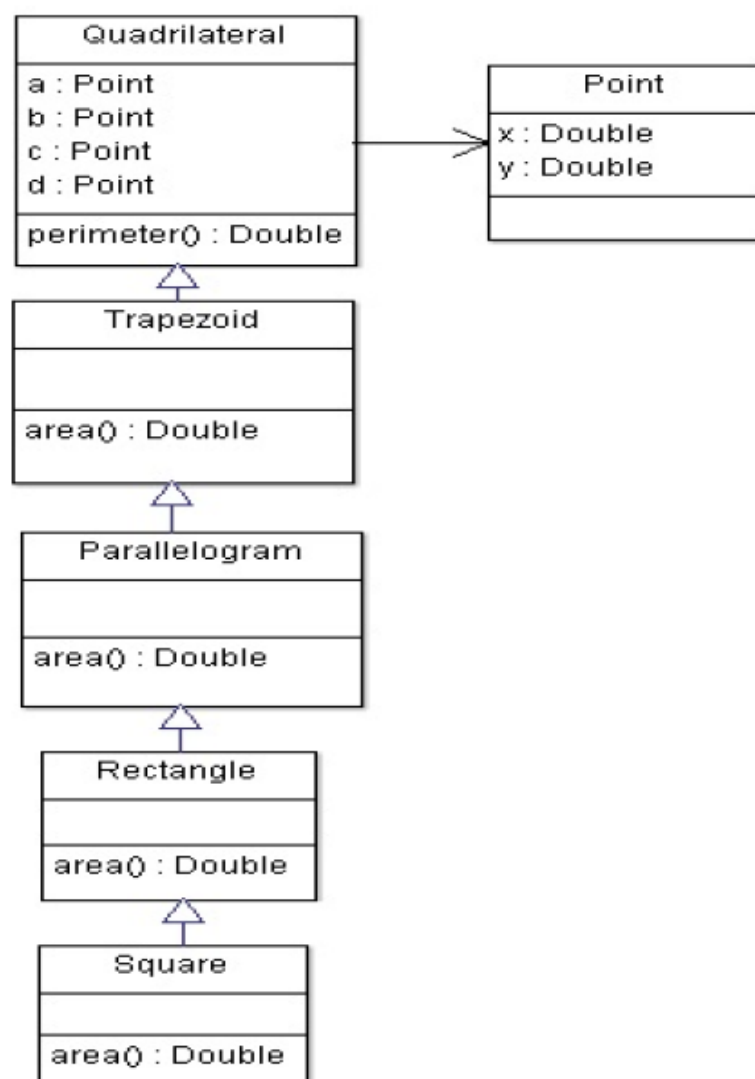# Lab-6   Date: 16/02/2018

Write an inheritance hierarchy for classes **Quadrilateral**, **Trapezoid**, **Parallelogram**, **Rectangle** and **Square**. Use Quadrilateral as the superclass of the hierarchy. Create and use a Point (with x and y co-ordinates) class to represent the points in each shape. Include methods to compute perimeter and area of the objects. Utilize the advantage of inheritance in providing these methods in the classes. Inheritance facilitates availability of super class member variables and methods in the sub class, write a method in the sub-class only if it is necessary. If the super class already provide a method for a particular task then the same functionality is available to sub-class as well.

The following hierarchy of classes can be defined.

Provide a test class to create different kinds of 2D geometrical objects and display their area and perimeter.