

**Assignment**

Deitel & Deitel Exercise 11.7

**HW05-1: (Deitel & Deitel Exercise 11.7)**

**11.7 (Quadrilateral Inheritance Hierarchy)** Write an inheritance hierarchy for classes `Quadrilateral`, `Trapezoid`, `Parallelogram`, `Rectangle` and `Square`. Use `Quadrilateral` as the base class of the hierarchy. Make the hierarchy as deep (i.e., as many levels) as possible. Specify the instance variables, properties and methods for each class. The private instance variables of `Quadrilateral` should be the  $x$ - $y$  coordinate pairs for the four endpoints of the `Quadrilateral`. Write an app that instantiates objects of your classes and outputs each object's area (except `Quadrilateral`).

**Grading Rubric**

Each problem is worth 10 pts (score will be recorded as a percentage of that amount)

- 10% Properly submitted
- 10% Properly named
- 20% Adequate comments
- 10% Runs
- 20% Produces correct output
- 30% Effort evidenced by the submitted work