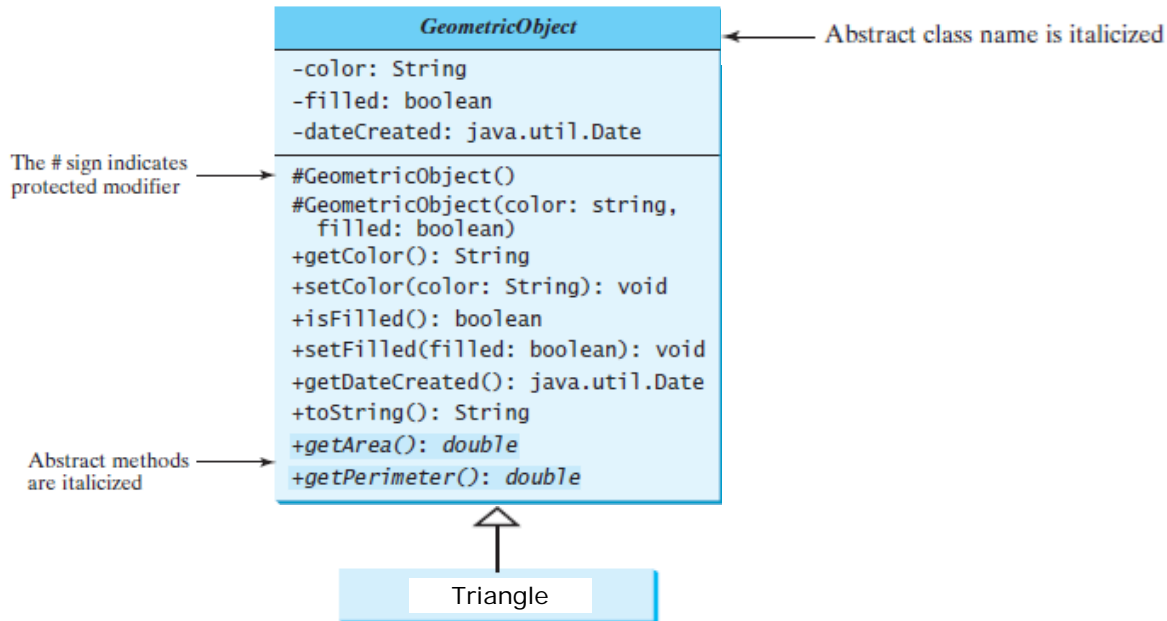


① Programming Exercise 13.1 p.529 (Triangle class)

Design a new Triangle class that extends the abstract GeometricObject class. Draw the UML diagram for the classes Triangle and GeometricObject and then implement the Triangle class. Write a test program that prompts the user to enter three sides of the triangle, a color, and a Boolean value to indicate whether the triangle is filled. The program should create a Triangle object with these sides and set the color and filled properties using the input. The program should display the area, perimeter, color, and true or false to indicate whether it is filled or not.



② Programming Exercise 13.10 p.530 (Enable Rectangle comparable)

Rewrite the Rectangle class in Listing 13.3 to extend GeometricObject and implement the Comparable interface. Override the equals method in the Object class. Two Rectangle objects are equal if their areas are the same. Draw the UML diagram that involves Rectangle, GeometricObject, and Comparable.

