LAB #4 – Inheritance and Polymorphism

Create classes for a Shape, Circle, and Rectangle. All shapes have a name and color and they take up some area. However, a circle’s area is dependent upon its radius, while a rectangle’s area is dependent on a length and width. You are to create these classes with the correct attributes in the correct class, with mutators and accessors for all the attributes.

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For your design be certain to answer these questions. What data members will you need in each class? What functions will you need in each class? Are the functions the same or different? Which function will you use to create the polymorphism?