Programming Project - Inheritance

1. Review the material about inheritance
2. Create a package in Eclipse called "geometry205". Add all the classes you create for part 3 to this package.
3. Complete the following programming assignment:
   - *Design and implement a set of classes that define a series of 2D geometric shapes.*
   - *For each shape, store information about its dimensions and any other attributes you think are necessary. Provide methods to access and modify this data where appropriate.*
   - *Provide an perimeter() and area() method for each shape.*
   - *In your design, consider how shapes are related and thus where inheritance can be implemented.*
   - *Create a driver class to instantiate several shapes of differing types and exercise the behavior you provided.*
4) You should implement classes for **at least** three shapes, including a circle, a rectangle and a square. You should have at least one abstract class.
5) The toString method should print the type of shape, its perimeter, and its area.
6) A sample test driver class will be provided for you to test your project. Your code should work with the provided driver without modification.

Think carefully about your design and use good object oriented principles in your implementation.

Submission requirements:

- Include your name as a comment at the top of each source code file
- Make good use of whitespace/comments to make your implementation clear.
- In a well-formatted .doc, .pdf, or .txt file, briefly describe your implementation & class hierarchy, give sample output, and include your abstract class and one of your shape classes.
- Upload a zip file with your code. The easiest thing is to zip your entire project directory. Do not use .rar.
- Include your first and last name in the .zip filename
- **Submit a hard copy of the implementation document**.