Exercise 1a

* Write an interface called Shape that declares two abstract methods: getParameter() and getArea().

Exercise 1b

* Write the implementation class Circle, with a protected variable radius, which implements the interface Shape.

Excercise 1c

* Create the class ResizableCircle that is a subclass of the class Circle. ResizableCircle implements an interface called Resizable. The interface Resizable declares an abstract method resize(), which modifies the dimension (i.e. radius) by the given percentage. Write the interface Resizable and the class ResizableCircle. Create in ResizableCircle a main class that will change the radius and print the Area of the circle.

Exercise 2a

* Create an interface called Agreeable that declares how to compare two objects. The interface has an abstract method called isSmallerThan(Agreeable other). Then, create a class called Shape that implements the Agreeable interface. Shape has two fields: int width, int height. The class has two constructors, one with empty arguments and one with two arguments, width and height.

Exercise 2b

* The class Shape has two methods. The first method is called calcArea and returns the area i.e. (int) width \* height. The second method implements the Agreeable interface. After create two new objects of type shape and compare them between them.