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/*
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 * Lab 2
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 *
 * As a student at Union College, I am part of a community that values
intellectual effort, curiosity and discovery. I understand that in
order to truly claim my educational and academic achievements, I am
obligated to act with academic integrity. Therefore, I affirm that I
will carry out my academic endeavors with full academic honesty, and I
rely on my fellow students to do the same.
 *
 * Draw and manipulate rectangles and practice using objects and
modifying those objects.
 *
 */

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import CSLib.DrawingBox;
import java.awt.Rectangle;
import CSLib.OutputBox;

public class RectangleTester {

    public static void main(String[] args) {
        /*
         * Experimenting with objects
         */
        DrawingBox myBoard;
        myBoard = new DrawingBox();
        myBoard.setVisible(true);
        //myBoard.drawRect(320,230,120,180);

        // Using a rectangle object now:
        Rectangle myRect;
        myRect = new Rectangle(320, 230, 120, 180);
        myBoard.drawRect(myRect);

        // Growing the rectangle object
        myRect.grow(20,20);
        myBoard.drawRect(myRect);

        // Translate
        myRect.translate(280, -50);
    }
}

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myBoard.drawRect(myRect);

// Set location
myRect.setLocation(75, 250);
myBoard.drawRect(myRect);

// Set location and set size
myRect.setLocation(75, 50);
myRect.setSize(200, 150);
myBoard.drawRect(myRect);

/*
 * Putting it all together
 */
DrawingBox newBoard;
Rectangle Rect1;
Rectangle Rect2;

newBoard = new DrawingBox();
newBoard.setVisible(true);

Rect1 = new Rectangle(50, 180, 120, 180);
Rect2 = new Rectangle(100, 240, 150, 200);

// Draw both rectangles
newBoard.drawRect(Rect1);
newBoard.drawRect(Rect2);

// Determining if they intersect

OutputBox intersectResultBox;
intersectResultBox = new OutputBox();

if (Rect1.intersects(Rect2) == true)
{
    intersectResultBox.println("They do intersect");
}
else
{
    intersectResultBox.println("They do not intersect");
}

// Create a union box

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Rectangle unionRect;  
unionRect = new Rectangle();  
unionRect = Rect2.union(Rect1);  
newBoard.drawRect(unionRect);  
  
// Proving the bounding rectangle  
if (unionRect.contains(Rect1) == true &&  
unionRect.contains(Rect2) == true)  
{  
    intersectResultBox.print("The union box contains  
Rectangle 1 and Rectangle 2");  
}  
else  
{  
    intersectResultBox.print("The union box does not  
contain either Rectangle 1 or Rectangle 2");  
}  
  
}  
  
}
```