Client:

```java
import second.Block;
import CSLib.DrawingBox;


/**
 * This is to test out the new blocks class
 * @author xavier
 *
 *I affirm that I have carried out the attached
 *academic endeavors with full academic honesty, in
 *accordance with the Union College Honor Code and
 *the course syllabus.
 *
 */
public class client {

	/**
	 * @param args
	 */
	public static void main(String[] args) {

		//Constructing my board and my block
		DrawingBox myBoard = new DrawingBox();
		DrawingBox myBoard2 = new DrawingBox();
		Block myblock = new Block();
		Block myblock2 = new Block();
		Block[] blockarray = new Block[5];




		//makes it so you can see the board
		myBoard.setVisible(true);

		//sets potisition of second block
		myblock2.setPosition(100,250);

		//draws both boxes
		myblock2.display(myBoard);
		myblock.display(myBoard);


		//Moves first box and shows it
		myblock.setPosition(300, 175);
		myblock.display(myBoard);

		//moves the second block and shows it
		myblock2.setPosition(200, 400);
		myblock2.display(myBoard);


		myblock.setPosition(700, 200);
		myblock.setDimenstions(2*myblock.getXSize(), myblock.getYSize(),
2*myblock.getZSize());
		myblock.display(myBoard);
```

```java
        //makes an array of 5 blocks and displays them
        for(int i=0;i<5;i++) {
            blockarray[i]=new Block(100, 100*(i+1));
            blockarray[i].display(myBoard2);
        }



    }

}
```

Original:

```java
package original;
import CSLib.DrawingBox;
import java.awt.Rectangle;

/**
 * Creates and manipulate three dimensional blocks with xyz dimentions
 * and xy position
 * @author Xavier
 *
 */


public class Block {


    //Constant xyz value
    final int DEFAULT_BLOCK_XYZ = 50;
    final int DEFAULT_BLOCK_POSX = 100;
    final int DEFAULT_BLOCK_POSY = 100;

    //Instance Variables
    private int xsize;
    private int ysize;
    private int zsize;
    private int xpos;
    private int ypos;


    //Constructors

    /**
     * Constructs the default block with default size and postion
     * @param takes no inputs
     */
    public Block(){
        xsize = DEFAULT_BLOCK_XYZ;
        ysize = DEFAULT_BLOCK_XYZ;
```

```java
        zsize = DEFAULT_BLOCK_XYZ;
        xpos = DEFAULT_BLOCK_POSX;
        ypos = DEFAULT_BLOCK_POSY;
    }


    /**
     * Constructs a block with default sizes and given coordinates
     * @param xpos The x position of the block, absolute value of input
     * @param ypos The y position of the block, absolute value of input
     */
    public Block(int setxpos, int setypos) {
        xsize = DEFAULT_BLOCK_XYZ;
        ysize = DEFAULT_BLOCK_XYZ;
        zsize = DEFAULT_BLOCK_XYZ;
        xpos = Math.abs(setxpos);
        ypos = Math.abs(setypos);
    }



    //Getter methods


    /**
     * @return gets the x size of the block
     */
    public int getXSize(){
        return xsize;
    }

    /**
     * @return gets the y size of the block
     */
    public int getYSize(){
        return ysize;
    }

    /**
     * @return gets the z size of the block
     */
    public int getZSize(){
        return zsize;
    }

    /**
     * @return gets the x position of the block
     */
    public int getXPos(){
        return xpos;
    }


    /**
     * @return gets the y position of the block
     */
    public int getYPos(){
        return ypos;
```

```java
    }

    //Setter methods

    /**
     * Changes the coordinates of the block
     * @param newx is the new x position, uses absolute value
     * @param newy is the new y position, uses absolute value
     */
    public void setPosition(int newxpos, int newypos) {
        xpos=Math.abs(newxpos);
        ypos=Math.abs(newypos);
    }


    /**
     * Changes the dimentions of the block
     * @param newxsize the new x size, uses absolute values
     * @param newysize the new y size, uses absolute values
     * @param newzsize the new z size, uses absolute values
     */
    public void setDimenstions(int newxsize, int newysize, int newzsize) {
        xsize=Math.abs(newxsize);
        ysize=Math.abs(newysize);
        zsize=Math.abs(newzsize);
    }


    /**
     * Displays the block on the given drawing box
     * @param box is a drawingbox to display the box on.
     */
    public void display(DrawingBox box) {
        Rectangle blockrect;
        blockrect = new Rectangle(xpos,ypos,xsize,ysize);
        box.drawRect(blockrect);

        for(int i=0;i<zsize;i++){
            blockrect.setLocation(xpos-(2*i), ypos-(2*i));
            box.drawRect(blockrect);
        }

    }
}



Second:

package second;
import CSLib.DrawingBox;
import java.awt.Rectangle;

/**
 * Creates and manipulate three dimensional blocks with xyz dimentions
 * and xy position
 * @author Xavier
```

```java
 *
 */



public class Block {

    //constants
    final Rectangle DEFAULT_RECT = new Rectangle(100,100,50,50);
    final int DEFAULT_DEPTH = 50;

    private Rectangle rect;
    private int depth;

    /**
     * Constructs the default block with default size and postion
     * @param takes no inputs
     */
    public Block(){
        rect=DEFAULT_RECT;
        depth=DEFAULT_DEPTH;

    }


    /**
     * Constructs a block with default sizes and given coordinates
     * @param xpos The x position of the block, absolute value of input
     * @param ypos The y position of the block, absolute value of input
     */
    public Block(int setxpos, int setypos) {
        depth=DEFAULT_DEPTH;
        rect = DEFAULT_RECT;
        rect.setLocation(Math.abs(setxpos), Math.abs(setypos));

    }



    //Getter methods


    /**
     * @return gets the x size of the block
     */
    public int getXSize(){
        return (int)(rect.getWidth());
    }

    /**
     * @return gets the y size of the block
     */
    public int getYSize(){
        return (int)(rect.getHeight());
    }

    /**
     * @return gets the z size of the block
```

```java
 */
public int getZSize(){
    return depth;
}

/**
 * @return gets the x position of the block
 */
public int getXPos(){
    return (int)(rect.getX());
}


/**
 * @return gets the y position of the block
 */
public int getYPos(){
    return (int)(rect.getY());
}


//Setter methods

/**
 * Changes the coordinates of the block
 * @param newx is the new x position, uses absolute value
 * @param newy is the new y position, uses absolute value
 */
public void setPosition(int newxpos, int newypos) {
    rect.setLocation(Math.abs(newxpos), Math.abs(newypos));
}


/**
 * Changes the dimentions of the block
 * @param newxsize the new x size, uses absolute values
 * @param newysize the new y size, uses absolute values
 * @param newzsize the new z size, uses absolute values
 */
public void setDimenstions(int newxsize, int newysize, int newzsize) {
    rect.setSize(Math.abs(newxsize), Math.abs(newysize));
    depth=Math.abs(newzsize);
}


/**
 * Displays the block on the given drawing box
 * @param box is a drawingbox to display the box on.
 */
public void display(DrawingBox box) {
    box.drawRect(rect);
    int xpos=(int)(rect.getX());
    int ypos=(int)(rect.getY());
    for(int i=0;i<depth;i++){
        rect.setLocation(xpos-(2*i), ypos-(2*i));
        box.drawRect(rect);
    }
}
```

}