

**Lab Goal :** This lab was designed to teach you more object oriented programming and how to write a very simple game.

**Lab Description :** Complete the code for the Board class located in Board.java. The Board consists of four Blocks. Each of the four Blocks is a different color. The Board class can be and will be used to write some games.

```
public class Board extends JPanel implements MouseListener
{
```

```
    private int width;
    private int height;
    private Block topLeft;
    private Block topRight;
    private Block botLeft;
    private Block botRight;
```

```
    //constructors
```

```
    public void paintComponent(Graphics window)
    {
        super.paintComponent(window);
```

```
        //draw all four blocks
```

```
    }
```

```
    public void swapTopRowColors()
    {
```

```
    }
```

```
    public void swapBottomRowColors()
    {
```

```
    }
```

```
    public void swapLeftColumnColors()
    {
```

```
    }
```

```
    public void swapRightColumnColors()
    {
```

```
    }
```

```
    public void mouseClicked(MouseEvent e)
    {
```

```
        int mouseX=e.getX();
        int mouseY=e.getY();
        int mouseButton = e.getButton();
```

```
        if(mouseButton==MouseEvent.BUTTON1)                //left mouse button pressed
        {
```

```
            //if mouse clicked on top left block - swap top left with top right
```

```
            //if mouse clicked on top right block - swap top right with top left
```

```
            //more checks for bottom left and bottom right
```

```
        }
```

```
        //else check for right mouse button click
```

```
            //if mouse clicked on top left block - swap top left with bottom left
```

```
            //if mouse clicked on top right block - swap top right with bottom right
```

```
            //more checks for bottom left and bottom right
```

```
        }
```

```
    }
```

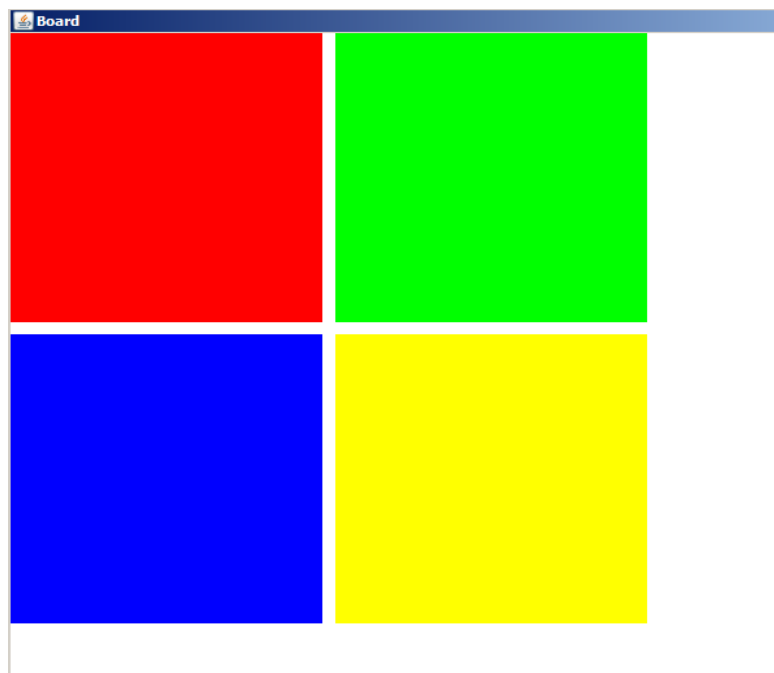
### Files Needed ::

**Locatable.java**

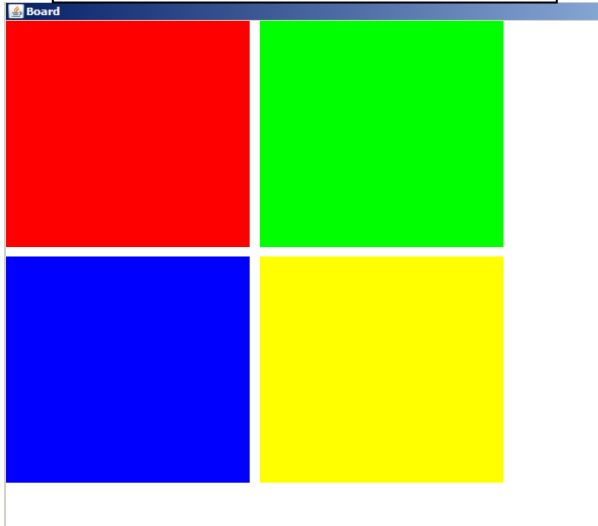
**Block.java**

**Board.java**

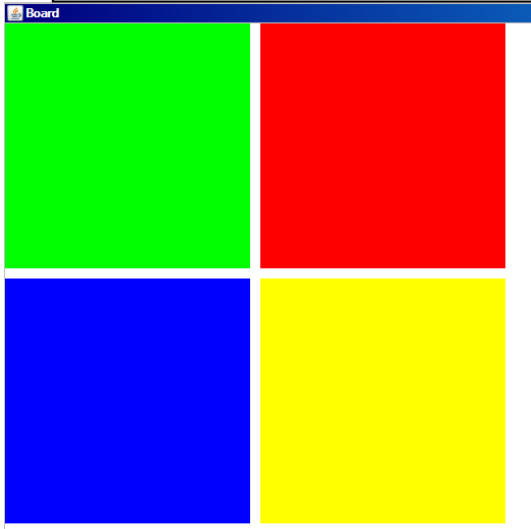
**BlockGame.java**



Before left-clicking on top left block.



After left-clicking on top left block.



After right-clicking on bottom right block.

