

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
    }
}
```

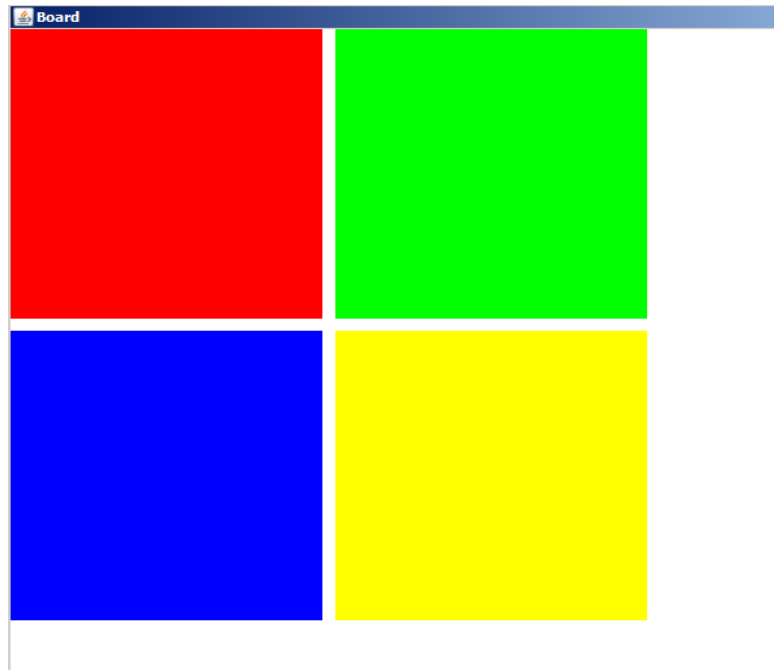
Files Needed ::

Locatable.java

Block.java

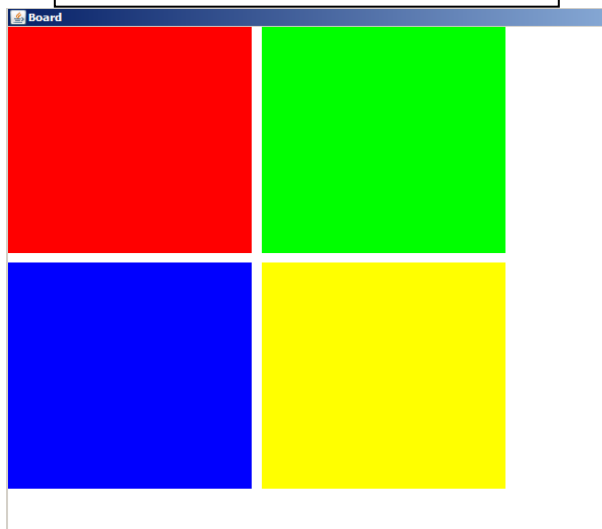
Board.java

BlockGame.java

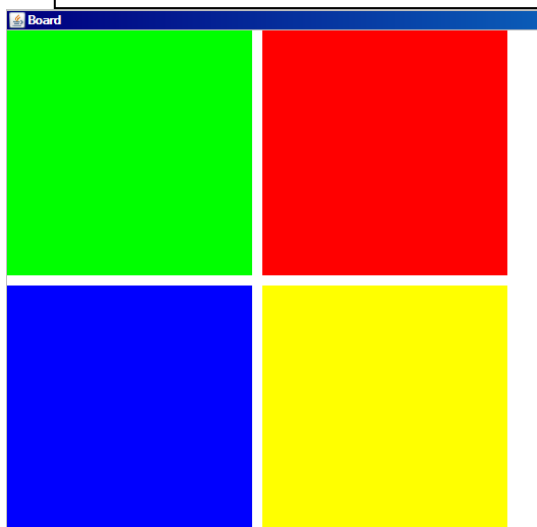


}
}

Before left-clicking on top left block.



After left-clicking on top left block.



After right-clicking on bottom right block.

