Experiment 11

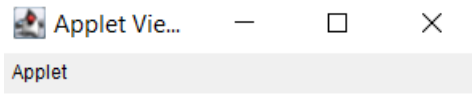
XII

1. → i) public void mousePressed (MouseEvent me)
   ii) public void mouseReleased (MouseEvent me)
   iii) public void mouseEntered (MouseEvent me)
   iv) public void mouseExited (MouseEvent me)
   v) public void mouseClicked (MouseEvent me)

3. → i) add The MouseListener to the frame.
   ~~ii) With the mouseClicked method~~
   ii) Create mouseClicked method & add ~~it~~ to MouseEvent ~~ev~~ class in its ~~parametheres~~ parameters.
   iii) Using the MouseEvent class object use the method getX() & getY() to obtain the x & y co-ordinate of the mouse.

4. → i) Implement the MouseListener and/or MouseMotionListener.
   ii) Override all the methods from the interfaces.
   iii) Add the Listeners for your components.
   ~~iv)~~

2 → All Components generate a MouseEvent

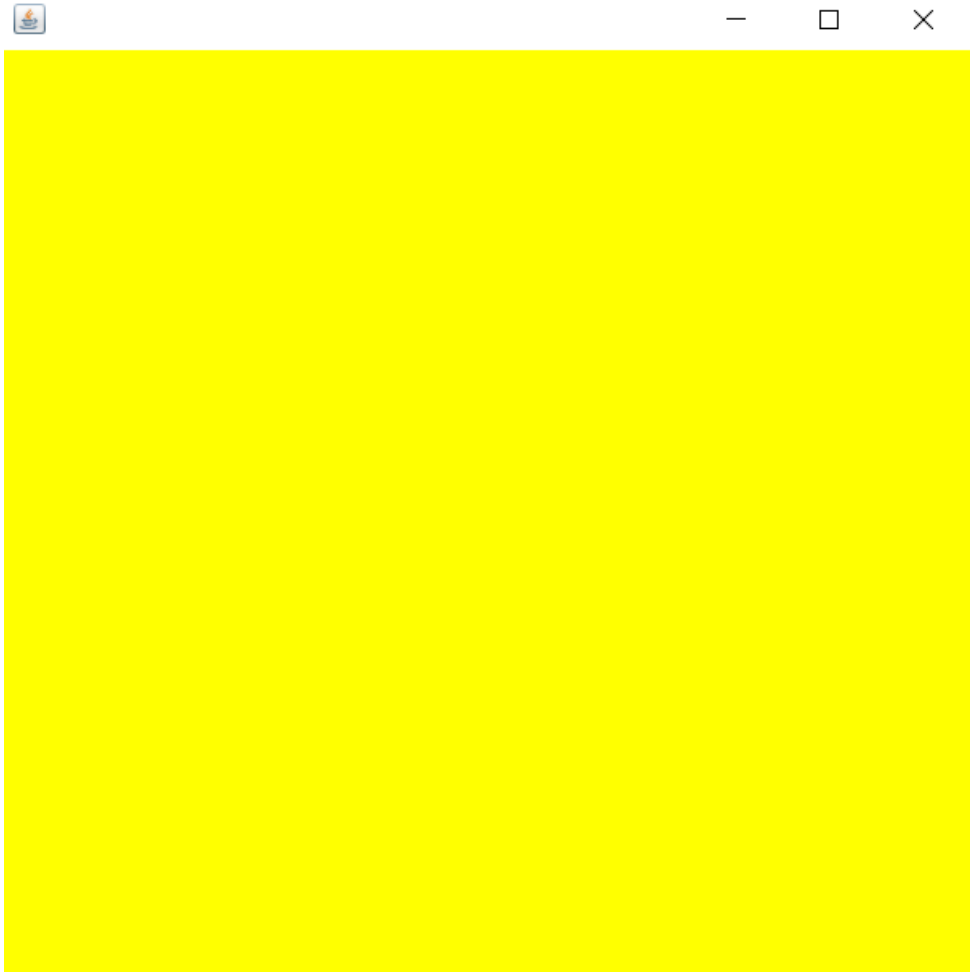


mouse clicked(# of clicks:3

Applet started.

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
public class MouseDemo0 extends JFrame implements MouseListener
{
   Container  co;
   MouseDemo()
   {
      co = getContentPane();
      co.addMouseListener(this);
      setVisible(true);
      setSize(500,500);
   }
   public void mousePressed(MouseEvent e)
   {
      co.setBackground(Color.red);
   }
   public void mouseReleased(MouseEvent e)
   {
      co.setBackground(Color.blue);
   }
   public void mouseEntered(MouseEvent e)
   {
      co.setBackground(Color.yellow);
   }
   public void mouseExited(MouseEvent e)
   {
      co.setBackground(Color.black);
   }
   public void mouseClicked(MouseEvent e)
   {
      co.setBackground(Color.green);
   }
   public static void main(String[] args) {
      new MouseDemo0 ();
   }
```

}



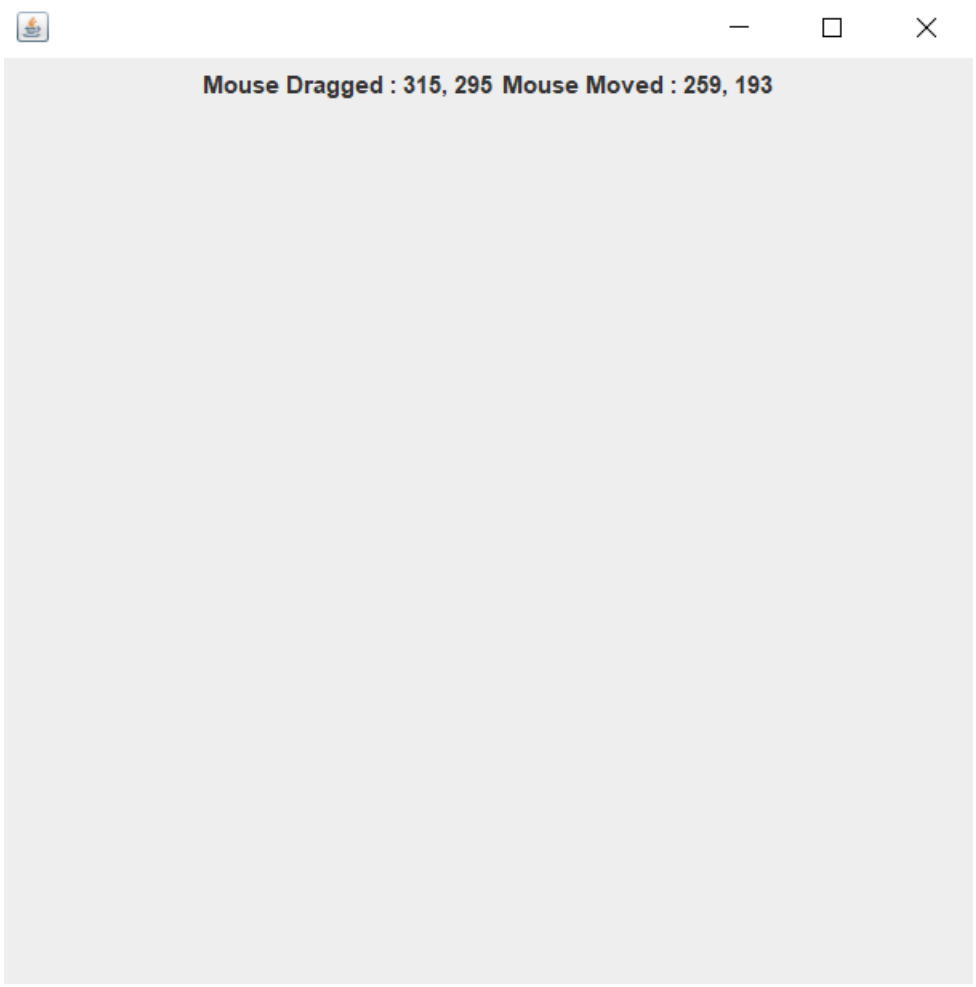
```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
public class MouseDemo1 extends JFrame implements MouseListener
{
   Container  co;
   int counter = 0;
   JLabel label;
   MouseDemo1() {
      co = getContentPane();
      label = new JLabel("Counter : "  + counter);
      co.add(label);
      co.addMouseListener(this);
      co.setLayout(new FlowLayout(FlowLayout.CENTER));
      setVisible(true);
      setSize(500,200);
   }
   public void mousePressed(MouseEvent e) {
   }
   public void mouseReleased(MouseEvent e) {
   }
   public void mouseEntered(MouseEvent e) {
   }
```

```
    public void mouseExited(MouseEvent e) {
    }
    public void mouseClicked(MouseEvent e) {
        counter++;
        label.setText("Counter : " + counter);
    }
    public static void main(String[] args) {
        new MouseDemo1();
    }
}
```


```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
public class MouseDemo2 extends JFrame implements MouseMotionListener
{
    Container  co;
    JLabel l1;
    JLabel l2;
    MouseDemo2() {
        co = getContentPane();

        l1 = new JLabel("Mouse Moved : None");
        l2 = new JLabel("Mouse Dragged : None");

        co.add(l1);
        co.add(l2);
        co.addMouseMotionListener(this);
        setLayout(new FlowLayout(FlowLayout.CENTER));
        setVisible(true);
        setSize(500,500);
    }
    public void mouseDragged(MouseEvent e) {
        l1.setText("Mouse Dragged : " + e.getX() + ", " + e.getY());
    }
    public void mouseMoved(MouseEvent e) {
        l2.setText("Mouse Moved : " + e.getX() + ", " + e.getY());
    }
    public static void main(String[] args) {
        new MouseDemo2();
    }
}
```


Mouse Dragged : 315, 295 Mouse Moved : 259, 193