

## “JP Practical 12: Write AWT/Swing program in Java to demonstrate different events”

### A] Code:

```
package graphical.ui.apps;

import javax.swing.*;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.awt.event.MouseAdapter;
import java.awt.event.MouseEvent;
import java.awt.event.KeyAdapter;
import java.awt.event.KeyEvent;

public class L_DifferentEventDemonstration extends JFrame{
    private JButton cliclButton;
    private JLabel mouseLabel;
    private JTextField keyTextField;

    public L_DifferentEventDemonstration(){
        setTitle("Event Handling demo by Krishna");
        setSize(400,200);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setLayout(new FlowLayout());

        // Button for button click event
        cliclButton = new JButton("Click Me");
        cliclButton.addActionListener(new ActionListener() {
            @Override
            public void actionPerformed(ActionEvent e) {
                JOptionPane.showMessageDialog(L_DifferentEventDemonstration.this, "Button Clicked!");
            }
        });

        // Label for mouse events
        mouseLabel = new JLabel("Move the mouse over this label");
        mouseLabel.addMouseListener(new MouseAdapter() {
            @Override
            public void mouseClicked(MouseEvent e) {
                super.mouseClicked(e);JOptionPane.showMessageDialog(L_DifferentEventDemonstration.this, "Mouse
```

```

Clicked!");
    }
});

//    Text field for key events
keyTextField = new JTextField(20);
keyTextField.addKeyListener(new KeyAdapter() {
    @Override
    public void keyTyped(KeyEvent e) {
        char typedChar = e.getKeyChar();
        JOptionPane.showMessageDialog(L_DifferentEventDemonstration.this, "Key Typed!");
    }
});

//    Add components to the frame
add(clickButton);
add(mouseLabel);
add(keyTextField);

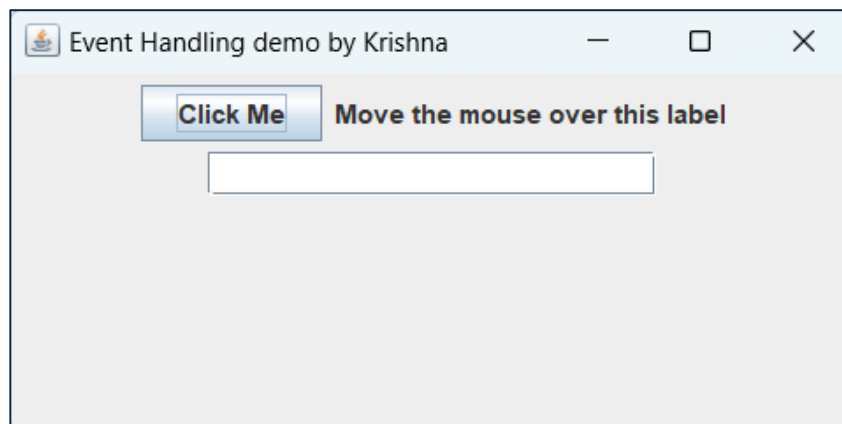
setVisible(true);
}

public static void main(String[] args) {
    SwingUtilities.invokeLater(() -> new L_DifferentEventDemonstration());
}
}

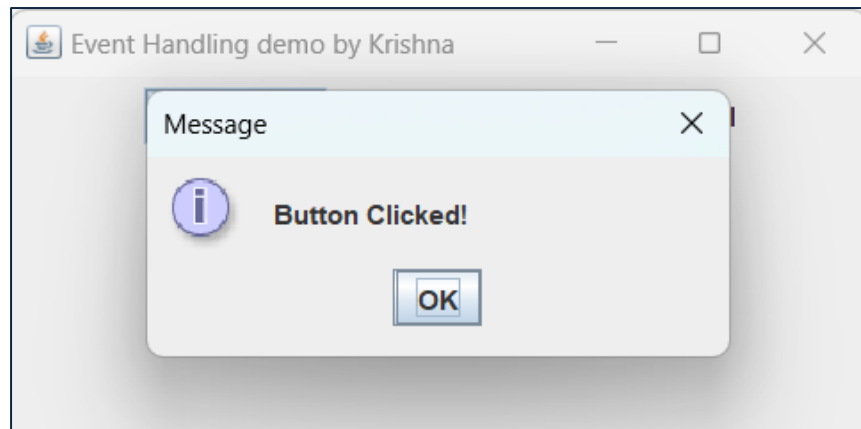
```

**B] O/P:**

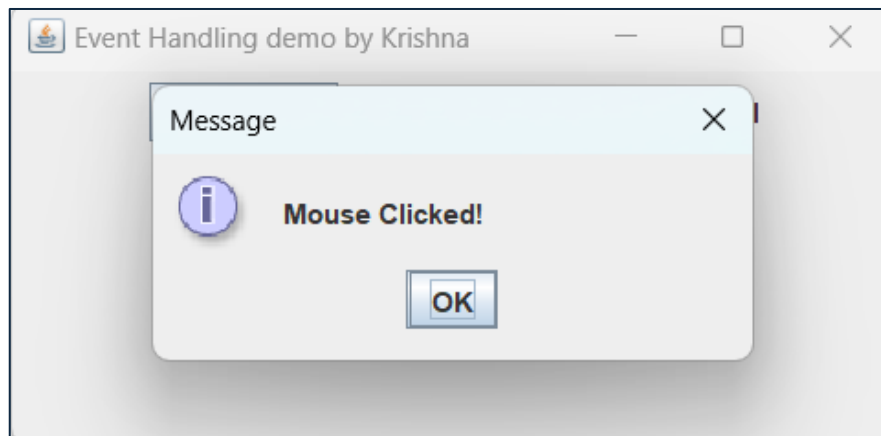
**a] Before event triggered:**



**b] After button clicked:**



**c] After mouse clicked over the label:**



**d] After key pressed in the input field:**

