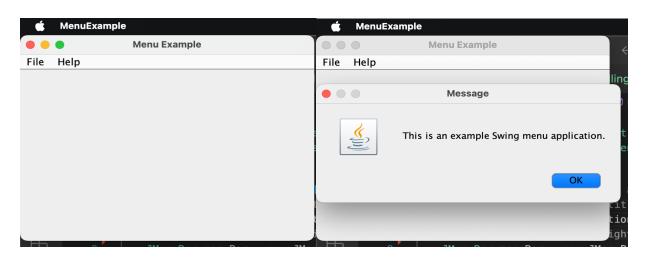
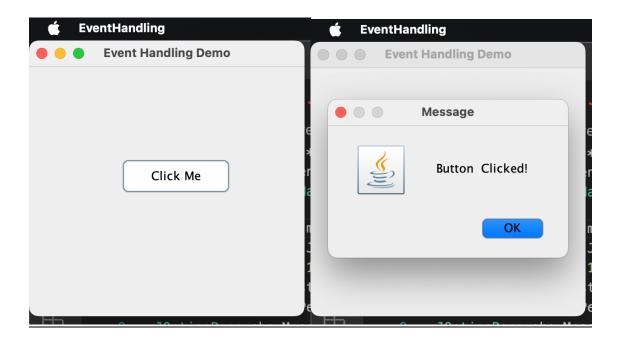
### WAP TO MAKE MENU AND MENUBAR:

```
import javax.swing.*;
    import java.awt.event.ActionListener;
    public class MenuExample {
       JFrame frame = new JFrame(title:"Menu Example");
frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        frame.setSize(width:400,height:300);
        JMenuBar menuBar = new JMenuBar();
        JMenu fileMenu = new JMenu(s:"File");
        JMenuItem newItem = new JMenuItem(text:"New");
        JMenuItem openItem = new JMenuItem(text:"Open");
        JMenuItem saveItem = new JMenuItem(text:"Save");
        JMenuItem exitItem = new JMenuItem(text: "Exit");
exitItem.addActionListener(new ActionListener() { @Override
            public void actionPerformed(ActionEvent e) {
            fileMenu.add(newItem);
            fileMenu.add(openItem);
            fileMenu.add(saveItem);
            fileMenu.addSeparator();
            fileMenu.add(exitItem);
            JMenu helpMenu = new JMenu(s:"Help");
JMenuItem aboutItem = new JMenuItem(text:"About");
            aboutItem.addActionListener(new ActionListener() {
                @Override
                public void actionPerformed(ActionEvent e) {
                    JOptionPane.showMessageDialog(parentComponent:null, message:"This is an example Swing menu application.");
J MenuExample.java > ☆ MenuExample > ☆ main(String[])
                       });
                      helpMenu.add(aboutItem);
 34
                       menuBar.add(fileMenu);
                      menuBar.add(helpMenu);
                       frame.setJMenuBar(menuBar);
                       frame.setVisible(b:true);
          }
          }
```

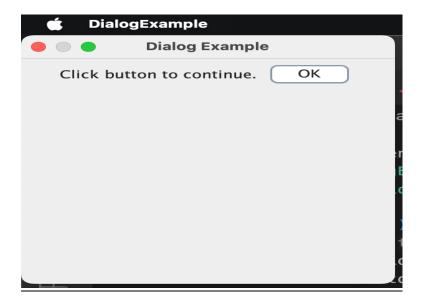


## **PROGRAM FOR EVENT HANDLING:**



### **PROGRAM FOR DIALOGS:**

```
J DialogExample.java > 😉 DialogExample > 🕤 DialogExample()
      import java.awt.*;
      import java.awt.event.*;
      public class DialogExample {
      private static Dialog d;
      DialogExample() {
      Frame f= new Frame();
      d = new Dialog(f , title:"Dialog Example", modal:true);
      d.setLayout( new FlowLayout() );
      Button b = new Button (label:"OK");
      b.addActionListener ( new ActionListener()
      public void actionPerformed( ActionEvent e ) {
      DialogExample.d.setVisible(b:false);
      });
      d.add( new Label (text:"Click button to continue."));  d.add(b);
      d.setSize(width:300,height:300);
      d.setVisible(b:true);
      Run | Debug
      public static void main(String args[])
      new DialogExample();
```



#### **PROGRAM FOR LOGIN FORM:**

```
J LoginForm.java > ...
      import javax.swing.*;
      import java.awt.*;
      import java.awt.event.ActionEvent;
      import java.awt.event.ActionListener;
      public class LoginForm extends JFrame {
      private JLabel titleLabel, usernameLabel, passwordLabel; private JTextField usernameField;
      private JPasswordField passwordField;
      private JButton loginButton;
      public LoginForm() {
      setTitle(title:"Login Form");
      setSize(width:300, height:200);
      setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
      setLayout(new GridLayout(rows:4, cols:2, hgap:5, vgap:5));
      titleLabel = new JLabel(text:"Login Form");
      titleLabel.setFont(new Font(name:"Arial", Font.BOLD, size:18)); add(titleLabel);
      usernameLabel = new JLabel(text:"Username:");
      add(usernameLabel);
      usernameField = new JTextField();
      add(usernameField);
      passwordLabel = new JLabel(text:"Password:");
      add(passwordLabel):
      passwordField = new JPasswordField();
      add(passwordField);
      loginButton = new JButton(text:"Login");
      loginButton.addActionListener(new ActionListener() { @Override
      public void actionPerformed(ActionEvent e) {
      String username = usernameField.getText();
      String password = new
      String(passwordField.getPassword());
      if (username.equals(anObject:"admin") &&
      password.equals(anObject:"admin123")) {
J LoginForm.java > ...
     JOptionPane.showMessageDialog(LoginForm.this,
     message:"Login Successful!");
     JOptionPane.showMessageDialog(LoginForm.this,
     message:"Invalid Username or Password", title:"Error", JOptionPane.ERROR_MESSAGE); }
     add(loginButton);
     setVisible(b:true);
     public static void main(String[] args) { SwingUtilities.invokeLater(new Runnable() { @Override
     public void run() {
     new LoginForm();
     });
```

