**20CS2025L - OBJECT ORIENTED PROGRAMMING(LAB) – BATCH 2 URK22AI1017**

|  |  |
| --- | --- |
| **EXERCISE: 10** | **JAVA SWINGS** |
| **DATE** | **19.10.2023** |

# 1.AIM:

To create a java GUI application using java swings.

# DESCRIPTION:

Java Swing is a part of Java Foundation Classes (JFC) that is used to create window-based applications. Swing is a lightweight Java graphical user interface (GUI) that is used to create various applications. Swing has platform-independent components. It enables the user to create buttons and scroll bars. Swing includes packages for creating desktop applications in Java. Swing components are written in Java language.

PROGRAM:

import javax.swing.\*; import java.awt.\*;

import java.awt.event.ActionEvent; import java.awt.event.ActionListener;

public class Main{

public static void main(String[] args) {

// Create and set up the JFrame

JFrame frame = new JFrame("Login Application"); frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE); frame.setSize(300, 150);

// Create a JPanel for the login form JPanel panel = new JPanel(); frame.add(panel);

// Set the layout for the panel panel.setLayout(new GridLayout(3, 2));

// Create username and password labels and fields JLabel usernameLabel = new JLabel("Username:"); JTextField usernameField = new JTextField();

JLabel passwordLabel = new JLabel("Password:"); JPasswordField passwordField = new JPasswordField();

// Create the login button

JButton loginButton = new JButton("Login");

// Add components to the panel panel.add(usernameLabel); panel.add(usernameField); panel.add(passwordLabel); panel.add(passwordField);

panel.add(new JLabel()); // Empty label for spacing panel.add(loginButton);

// Add an ActionListener to the login button loginButton.addActionListener(new ActionListener() {

@Override

public void actionPerformed(ActionEvent e) { String username = usernameField.getText(); char[] password = passwordField.getPassword(); String enteredPassword = new String(password);

if (username.equals("Karunya") && enteredPassword.equals("Karunya")) { JOptionPane.showMessageDialog(frame, "Login Successful");

} else {

JOptionPane.showMessageDialog(frame, "Login Failed");

}

}

});

// Clear the password field after login attempt passwordField.setText("");

**20CS2025L - OBJECT ORIENTED PROGRAMMING(LAB) – BATCH 2 URK22AI1017**

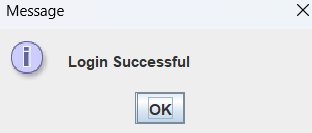
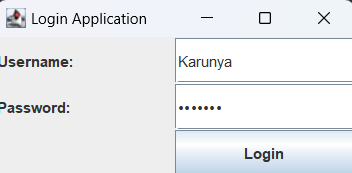
// Make the JFrame visible frame.setVisible(true);

}

**}**

**20CS2025L - OBJECT ORIENTED PROGRAMMING(LAB) – BATCH 2 URK22AI1017**

# OUTPUT:



**RESULT:**

The above program is successfully executed.

**20CS2025L - OBJECT ORIENTED PROGRAMMING(LAB) – BATCH 2 URK22AI1017**

# 1.AIM:

To create a java GUI application using java swings.

# DESCRIPTION:

Java Swing is a part of Java Foundation Classes (JFC) that is used to create window-based applications. Swing is a lightweight Java graphical user interface (GUI) that is used to create various applications. Swing has platform-independent components. It enables the user to create buttons and scroll bars. Swing includes packages for creating desktop applications in Java. Swing components are written in Java language.

# PROGRAM:

import javax.swing.\*; import java.awt.\*;

import java.awt.event.ActionEvent; import java.awt.event.ActionListener;

public class ButtonDemo {

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

}

private static void createAndShowGUI() { JFrame frame = new JFrame("Button Demo");

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE); frame.setSize(300, 150);

frame.setLayout(new FlowLayout());

JPanel buttonPanel = new JPanel();

buttonPanel.setLayout(new BoxLayout(buttonPanel, BoxLayout.Y\_AXIS)); JLabel label = new JLabel("Press a button");

JButton yesButton = new JButton(" Yes "); JButton noButton = new JButton(" No "); JButton closeButton = new JButton(" Close ");

// Add action listeners to the Yes and No buttons yesButton.addActionListener(new ActionListener() {

@Override

public void actionPerformed(ActionEvent e) { label.setText("Button Yes is pressed");

**20CS2025L - OBJECT ORIENTED PROGRAMMING(LAB) – BATCH 2 URK22AI1017**

}

});

noButton.addActionListener(new ActionListener() { @Override

public void actionPerformed(ActionEvent e) { label.setText("Button No is pressed");

}

});

// Add action listener to the Close button closeButton.addActionListener(new ActionListener() {

@Override

public void actionPerformed(ActionEvent e) { frame.dispose(); // Close the frame

}

});

buttonPanel.add(yesButton); buttonPanel.add(noButton); buttonPanel.add(closeButton);

frame.add(buttonPanel); frame.add(label);

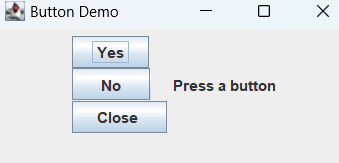
frame.setVisible(true);

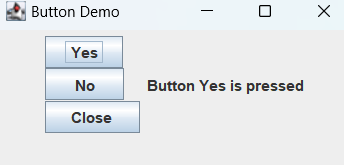
}

}

**20CS2025L - OBJECT ORIENTED PROGRAMMING(LAB) – BATCH 2 URK22AI1017**

# OUTPUT:





**RESULT:**

The above program is successfully executed.