

Latihan01 Source code:

```
package com.ibik.pbo.praktikum;

import java.awt.BorderLayout;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import javax.swing.*.*;

public class Latihan01 extends JFrame {
    Latihan01() {
        setVisible(true);
        pack();
        setSize(300,300);
        setLocationRelativeTo(null);
        setTitle("Latihan 01");

        GenerateMenuButton(this);
    }
    public static void main( String[] args )
    {
        new Latihan01();

    }
    private void GenerateMenuButton(JFrame frame) {
        JPanel upperPanel = new JPanel();
        JButton btn_hello = new JButton("你好");
        JButton btn_halo = new JButton("Halo");

        btn_hello.setSize(100, 50);
        btn_halo.setSize(100, 50);

        upperPanel.add(btn_halo);
        upperPanel.add(btn_hello);

        JPanel bottomPanel = new JPanel();
        JButton btn_ibik = new JButton("IBIK");

        btn_ibik.setSize(100, 50);
        bottomPanel.add(btn_ibik);

        btn_halo.addActionListener(new ActionListener() {

            @Override
            public void actionPerformed(ActionEvent e) {
                JOptionPane.showMessageDialog(null, "it means 'hello' in
indonesia");
            }

        });
        btn_hello.addActionListener(new ActionListener() {
```

```

        @Override
        public void actionPerformed(ActionEvent e) {
            JOptionPane.showMessageDialog(null, "it means 'hello' in
chinese");
        }

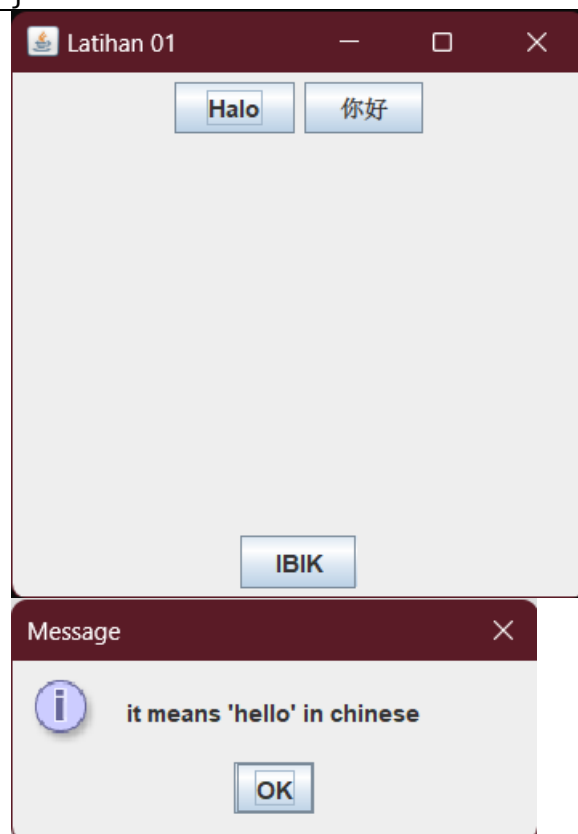
    });
    btn_ibik.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
            JOptionPane.showMessageDialog(null, "hello ibik");
        }

    });

    frame.add(upperPanel, BorderLayout.NORTH);
    frame.add(bottomPanel, BorderLayout.SOUTH);
}
}

```



Latihan02 Source code:

```

package com.ibik.pbo.praktikum;
import java.awt.BorderLayout;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;

import javax.swing.*;

```

```
public class Latihan02 extends JFrame {
    Latihan02() {
        setTitle("Latihan 02");
        setVisible(true);
        pack();
        setSize(350,450);
        setLocationRelativeTo(null);
        setResizable(false);
        GenerateUI(this);
        setLayout(null);
    }
    public static void main(String [] args) {
        new Latihan02();
    }

    private void GenerateUI(JFrame frame) {
        JPanel mainPanel = new JPanel();
        mainPanel.setLayout(new BorderLayout());
        frame.setContentPane(mainPanel);

        final JLabel fullName = new JLabel("Fullname");
        fullName.setBounds(25, 20, 80, 30);
        frame.add(fullName, BorderLayout.WEST);

        final JTextField textFullName = new JTextField();
        textFullName.setBounds(100, 20, 160, 30);
        frame.add(textFullName);

        final JLabel email = new JLabel("Email");
        email.setBounds(20, 75, 80, 30);
        frame.add(email, BorderLayout.WEST);

        final JTextField textEmail = new JTextField();
        textEmail.setBounds(100, 75, 160, 30);
        frame.add(textEmail);

        final JLabel phone = new JLabel("Phone");
        phone.setBounds(20, 130, 80, 30);
        frame.add(phone, BorderLayout.WEST);

        final JTextField textPhone = new JTextField();
        textPhone.setBounds(100, 130, 160, 30);
        frame.add(textPhone);

        JLabel gender = new JLabel("Gender");
        gender.setBounds(20,175, 80, 30);
        frame.add(gender, BorderLayout.WEST);

        final JRadioButton radioGender1 = new JRadioButton("Female");
```

```

radioGender1.setBounds(105, 175, 100, 30);
frame.add(radioGender1);

final JRadioButton radioGender2 = new JRadioButton("Male");
radioGender2.setBounds(200, 175, 100, 30);
frame.add(radioGender2);

JLabel citizenship = new JLabel("Citizenship");
citizenship.setBounds(20, 215, 80, 30);
frame.add(citizenship, BorderLayout.WEST);

String country[] = {"Indonesia", "India", "Australia", "Japan", "USA"};
final JComboBox selectCitizen = new JComboBox(country);
selectCitizen.setBounds(100, 215, 169, 30);
frame.add(selectCitizen);

final JButton btn_submit = new JButton("SUBMIT");
btn_submit.setBounds(100, 260, 169, 30);
frame.add(btn_submit);

btn_submit.addActionListener(new ActionListener () {

    @Override
    public void actionPerformed(ActionEvent e) {
        if(textFullName.getText() == null || textEmail.getText() == null ||
textPhone.getText() == null || (!radioGender1.isSelected() && !radioGender2.isSelected())) {
            JOptionPane.showMessageDialog(null, "isi data dengan
benar!", "PERINGATAN", JOptionPane.WARNING_MESSAGE);
        }
        else {
            if(e.getSource() == btn_submit) {
                String output = "BIODATA \n \n";
                String outputGender = "";

                if(radioGender1.isSelected()) {
                    outputGender = radioGender1.getText();
                    output += "Fullname : " +
textFullName.getText() + "\n" + "Email : " + textEmail.getText() + "\n" + "Phone : " +
textPhone.getText() + "\n" + "Gender : " + outputGender + "\n" + "Citizenship : " +
selectCitizen.getSelectedItem();
                }
                else {
                    outputGender = radioGender2.getText();
                    output += "Fullname : " +
textFullName.getText() + "\n" + "Email : " + textEmail.getText() + "\n" + "Phone : " +
textPhone.getText() + "\n" + "Gender : " + outputGender + "\n" + "Citizenship : " +
selectCitizen.getSelectedItem();
                }

                JOptionPane.showMessageDialog(null, output);
            }
        }
    }
});

```

```

    }
    }
    }
    });
}

```

Latihan 02

Fullname

Email

Phone

Gender ☐ Female ☐ Male

Citizenship  ▼

**SUBMIT**

Message

**BIODATA**

Fullname : Daphne Holy  
 Email : daphneholy@gmail.com  
 Phone : 085890953470  
 Gender : Female  
 Citizenship : Indonesia

**OK**

Latihan03 Source code:

```

package com.ibik.pbo.praktikum;
import java.awt.BorderLayout;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.util.Arrays;

```

```

import javax.swing.*;

public class Latihan03 extends JFrame{
    private JLabel email, password;
    private JCheckBox remember;
    private JTextField textemail;
    private JPasswordField textpassword;
    private JButton btn_submit;

    Latihan03() {
        setTitle("Latihan 03");
        setLocationRelativeTo(null);
        setVisible(true);
        pack();
        setResizable(true);
        setSize(300, 350);
        GenerateUI(this);
        setLayout(null);
    }
    public static void main(String[] args) {
        new Latihan03();
    }

    private static boolean isPasswordCorrect(char[] input) {
        boolean isCorrect = true;
        char[] correctPassword = {'2','1','2','3','1','0','0','3','0'};

        if(input.length != correctPassword.length) {
            isCorrect = false;
        } else {
            isCorrect = Arrays.equals (input, correctPassword);
        }

        Arrays.fill(correctPassword, '0');
        return isCorrect;
    }

    private void GenerateUI(JFrame frame) {
        JPanel mainPanel = new JPanel();
        mainPanel.setLayout(new BorderLayout());
        frame.setContentPane(mainPanel);

        email = new JLabel("Email");
        textemail = new JTextField();
        textemail.setBounds(100, 20, 160, 30);
        email.setBounds(20, 20, 80, 30);
        frame.add(email); frame.add(textemail);

        password = new JLabel("Password");
        textpassword = new JPasswordField();
    }

```

```

textpassword.setBounds(100, 80, 160, 30);
password.setBounds(20, 75, 80, 30);
frame.add(password); frame.add(textpassword);

remember = new JCheckBox("Remember Account? ");
remember.setBounds(75, 130, 200, 30);
frame.add(remember);

btn_submit = new JButton("SUBMIT");
btn_submit.setBounds(75, 180, 150, 30);
frame.add(btn_submit);

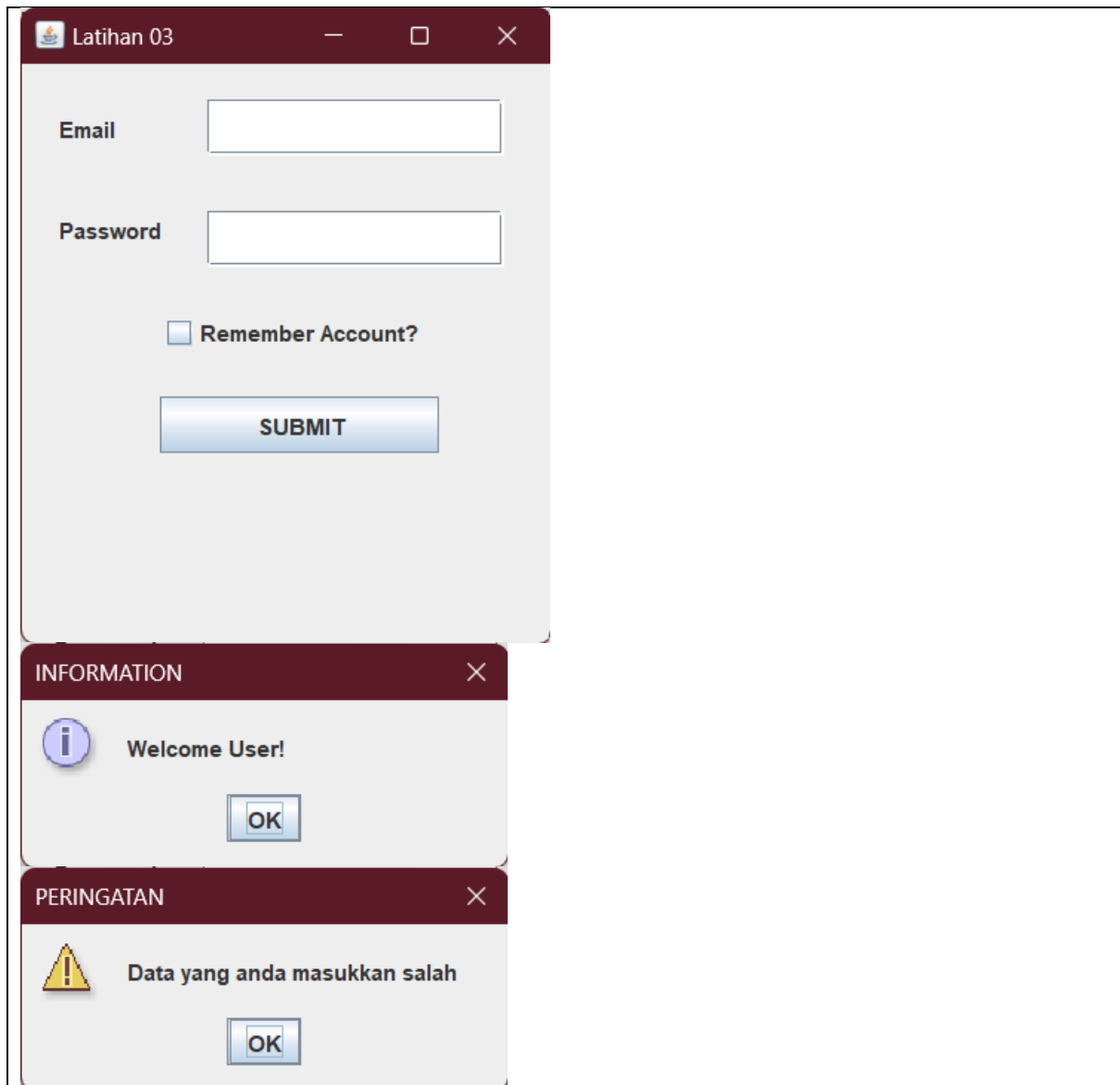
btn_submit.addActionListener(new ActionListener() {

    @Override
    public void actionPerformed(ActionEvent e) {
        char[] input = textpassword.getPassword();

        if(textemail.getText() == null ||
textpassword.getPassword() == null) {
            JOptionPane.showMessageDialog(null, "isi data
dengan benar!", "PERINGATAN", JOptionPane.WARNING_MESSAGE);
        } else {
            if (isPasswordCorrect(input) && e.getSource() ==
btn_submit) {
                JOptionPane.showMessageDialog(null, "Welcome
User!", "INFORMATION", JOptionPane.INFORMATION_MESSAGE);
            } else {
                JOptionPane.showMessageDialog(null, "Data
yang anda masukkan salah", "PERINGATAN", JOptionPane.WARNING_MESSAGE);
            }
        }
    }

});
}
}

```



Latihan04 Source code:

```
package com.ibik.pbo.praktikum;

import java.awt.EventQueue;

import javax.swing.JFrame;
import javax.swing.JLabel;
import java.awt.BorderLayout;
import javax.swing.SwingConstants;
import javax.swing.JTable;
import java.awt.Font;
import javax.swing.JPanel;
import javax.swing.table.DefaultTableModel;
import javax.swing.JTextPane;
import javax.swing.border.TitledBorder;
import javax.swing.border.EtchedBorder;
import java.awt.Color;
```



```

import javax.swing.JTextField;
import javax.swing.JRadioButton;
import javax.swing.JButton;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import javax.swing.JMenuBar;
import javax.swing.JMenu;
import javax.swing.JMenuItem;

public class Latihan04 {

    private JFrame frame;
    private JTable table;
    private JPanel panel;
    private JTextField textField;
    private JLabel lblNewLabel_2;
    private JTextField textField_1;
    private JLabel lblNewLabel_3;
    private JRadioButton rdbtnB;
    private JRadioButton rdbtnC;
    private JRadioButton rdbtnD;
    private JRadioButton rdbtnE;
    private JRadioButton rdbtnF;
    private JButton btnDelete;
    private JButton btnClear;

    /**
     * Launch the application.
     */
    public static void main(String[] args) {
        EventQueue.invokeLater(new Runnable() {
            public void run() {
                try {
                    Latihan04 window = new Latihan04();
                    window.frame.setVisible(true);
                } catch (Exception e) {
                    e.printStackTrace();
                }
            }
        });
    }

    /**
     * Create the application.
     */
    public Latihan04() {
        initialize();
    }

    /**
     * Initialize the contents of the frame.

```

```

*/
private void initialize() {
    frame = new JFrame();
    frame.setBounds(100, 100, 795, 376);

    JLabel lblNewLabel = new JLabel("FORM PENILAIAN MATAKULIAH PBO");
    lblNewLabel.setFont(new Font("Tahoma", Font.PLAIN, 18));
    lblNewLabel.setHorizontalAlignment(SwingConstants.CENTER);
    frame.getContentPane().add(lblNewLabel, BorderLayout.NORTH);

    table = new JTable();
    table.setFont(new Font("Tahoma", Font.PLAIN, 10));
    table.setModel(new DefaultTableModel(
        new Object[][] {
            {"NPM", "NAMA", "NILAI"},
            {"212310019", "MUHAMMAD RAFI ZUHAIR ARTADINATA", "A"},
            {"212310030", "DAPHNE HOLY", "A"},
            {"212310034", "RADEN RAYYAN PRATAMA RAKHMADIE", "A"},
        },
        new String[] {
            "New column", "New column", "New column"
        }
    ));
    table.getColumnModel().getColumn(1).setPreferredWidth(204);
    frame.getContentPane().add(table, BorderLayout.EAST);

    panel = new JPanel();
    panel.setBorder(new TitledBorder(new EtchedBorder(EtchedBorder.LOWERED,
new Color(255, 255, 255), new Color(160, 160, 160)), "MAHASISWA", TitledBorder.LEADING,
TitledBorder.TOP, null, new Color(0, 0, 0)));
    panel.setToolTipText("");
    frame.getContentPane().add(panel, BorderLayout.CENTER);
    panel.setLayout(null);

    JLabel lblNewLabel_1 = new JLabel("NPM");
    lblNewLabel_1.setFont(new Font("Tahoma", Font.PLAIN, 15));
    lblNewLabel_1.setBounds(32, 36, 45, 13);
    panel.add(lblNewLabel_1);

    textField = new JTextField();
    textField.setBounds(32, 59, 267, 34);
    panel.add(textField);
    textField.setColumns(10);

    lblNewLabel_2 = new JLabel("Nama");
    lblNewLabel_2.setFont(new Font("Tahoma", Font.PLAIN, 15));
    lblNewLabel_2.setBounds(32, 103, 45, 13);
    panel.add(lblNewLabel_2);

    textField_1 = new JTextField();
    textField_1.setColumns(10);

```

```
textField_1.setBounds(32, 127, 267, 34);
panel.add(textField_1);

lblNewLabel_3 = new JLabel("Nilai");
lblNewLabel_3.setFont(new Font("Tahoma", Font.PLAIN, 15));
lblNewLabel_3.setBounds(32, 188, 45, 13);
panel.add(lblNewLabel_3);

JRadioButton rdbtnNewRadioButton = new JRadioButton("A");
rdbtnNewRadioButton.setFont(new Font("Tahoma", Font.PLAIN, 14));
rdbtnNewRadioButton.setBounds(32, 218, 45, 21);
panel.add(rdbtnNewRadioButton);

rdbtnB = new JRadioButton("B");
rdbtnB.setFont(new Font("Tahoma", Font.PLAIN, 14));
rdbtnB.setBounds(72, 218, 45, 21);
panel.add(rdbtnB);

rdbtnC = new JRadioButton("C");
rdbtnC.setFont(new Font("Tahoma", Font.PLAIN, 14));
rdbtnC.setBounds(119, 218, 45, 21);
panel.add(rdbtnC);

rdbtnD = new JRadioButton("D");
rdbtnD.setFont(new Font("Tahoma", Font.PLAIN, 14));
rdbtnD.setBounds(166, 218, 45, 21);
panel.add(rdbtnD);

rdbtnE = new JRadioButton("E");
rdbtnE.setFont(new Font("Tahoma", Font.PLAIN, 14));
rdbtnE.setBounds(213, 218, 45, 21);
panel.add(rdbtnE);

rdbtnF = new JRadioButton("F");
rdbtnF.setFont(new Font("Tahoma", Font.PLAIN, 14));
rdbtnF.setBounds(260, 218, 45, 21);
panel.add(rdbtnF);

JButton btnNewButton = new JButton("SAVE");
btnNewButton.setBounds(32, 251, 85, 34);
panel.add(btnNewButton);

btnDelete = new JButton("DELETE");
btnDelete.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
    }
});
btnDelete.setBounds(143, 251, 85, 34);
panel.add(btnDelete);

btnClear = new JButton("CLEAR");
```

```

btnClear.setBounds(250, 251, 85, 34);
panel.add(btnClear);

JMenuBar menuBar = new JMenuBar();
frame.setJMenuBar(menuBar);

JMenu mnNewMenu = new JMenu("File");
menuBar.add(mnNewMenu);

JMenuItem mntmSaveAs = new JMenuItem("New");
mnNewMenu.add(mntmSaveAs);

JMenuItem mntmNewMenuItem = new JMenuItem("Open");
mnNewMenu.add(mntmNewMenuItem);

JMenuItem mntmSave = new JMenuItem("Save");
mnNewMenu.add(mntmSave);

JMenu mnEdit = new JMenu("Edit");
menuBar.add(mnEdit);

JMenu mnHelp = new JMenu("Help");
menuBar.add(mnHelp);
}

```

| NPM       | NAMA                            | NILAI |
|-----------|---------------------------------|-------|
| 212310019 | MUHAMMAD RAFI ZUHAIR ARTADINATA | A     |
| 212310030 | DAPHNE HOLY                     | A     |
| 212310034 | RADEN RAYYAN PRATAMA RAKHMADIE  | A     |