LAPORAN PRAKTIKUM

PEMROGRAMAN BERORIENTASI OBJEK

(Dosen Pengampu: *Dede Husen, M.Kom*)

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KELAS : TINFC-2023-04

TEKNIK INFORMATIKA

FAKULTAS ILMU KOMPUTER

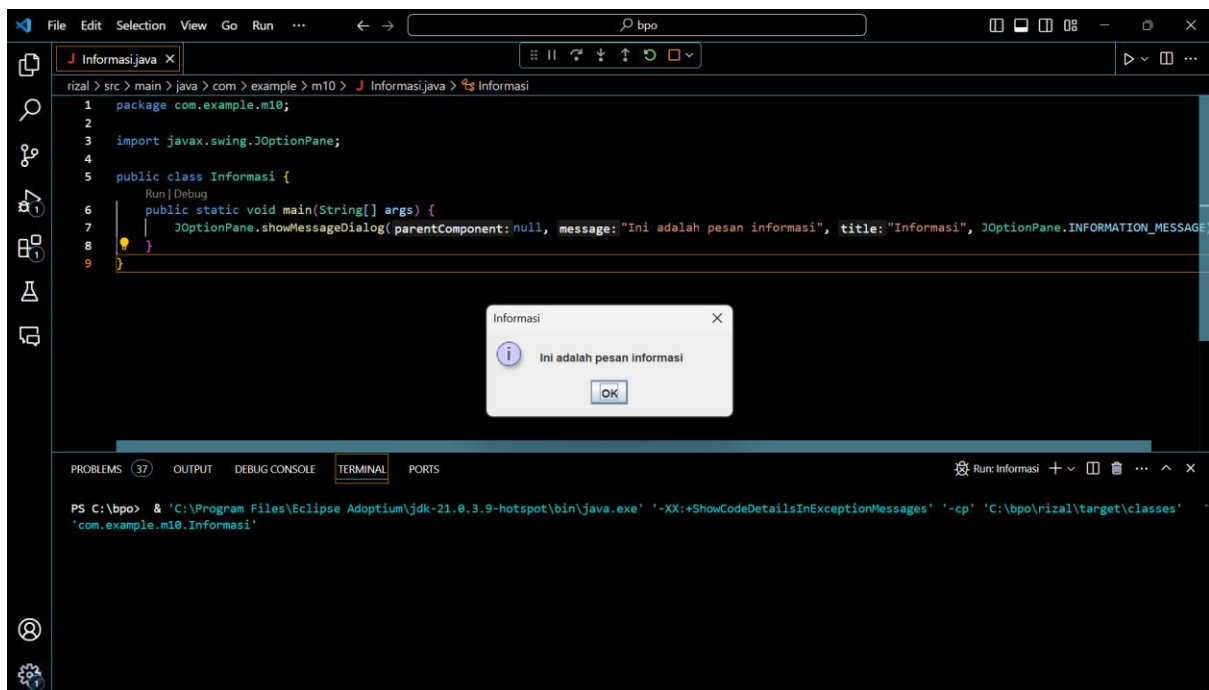# UNIVERSITAS KUNINGAN

2024

PRETEST

1. Berikan contoh penggunaan JOptionPane.

```java
package com.example.m10;

import javax.swing.JOptionPane;

public class Informasi {
    public static void main(String[] args) {
        JOptionPane.showMessageDialog(null, "Ini adalah pesan informasi",
"Informasi", JOptionPane.INFORMATION_MESSAGE);
    }
}
```
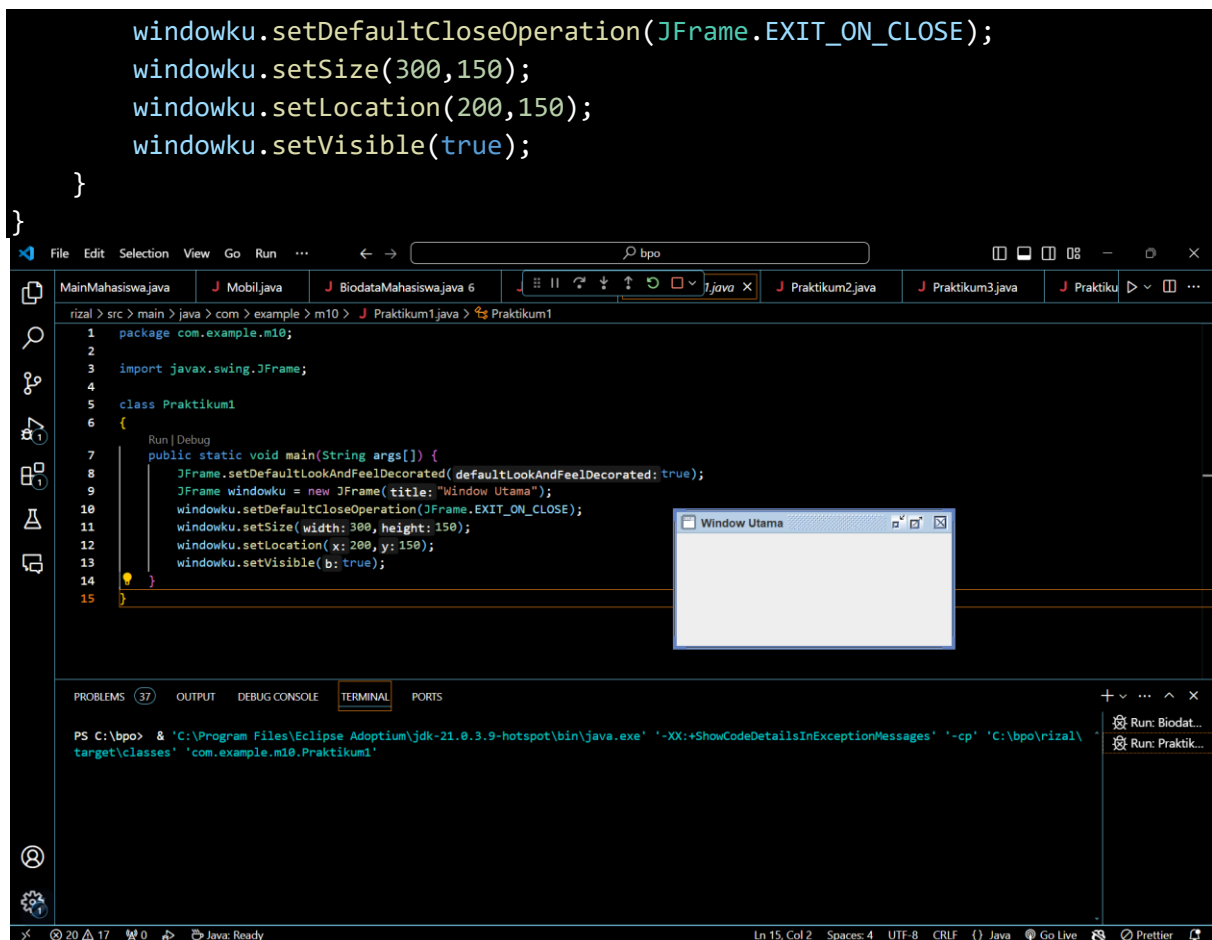

PRAKTIKUM 1

```java
package com.example.m10;

import javax.swing.JFrame;

class Praktikum1
{
    public static void main(String args[]) {
        JFrame.setDefaultLookAndFeelDecorated(true);
        JFrame windowku = new JFrame("Window Utama");
```

```java
        windowku.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        windowku.setSize(300,150);
        windowku.setLocation(200,150);
        windowku.setVisible(true);
    }
}
```


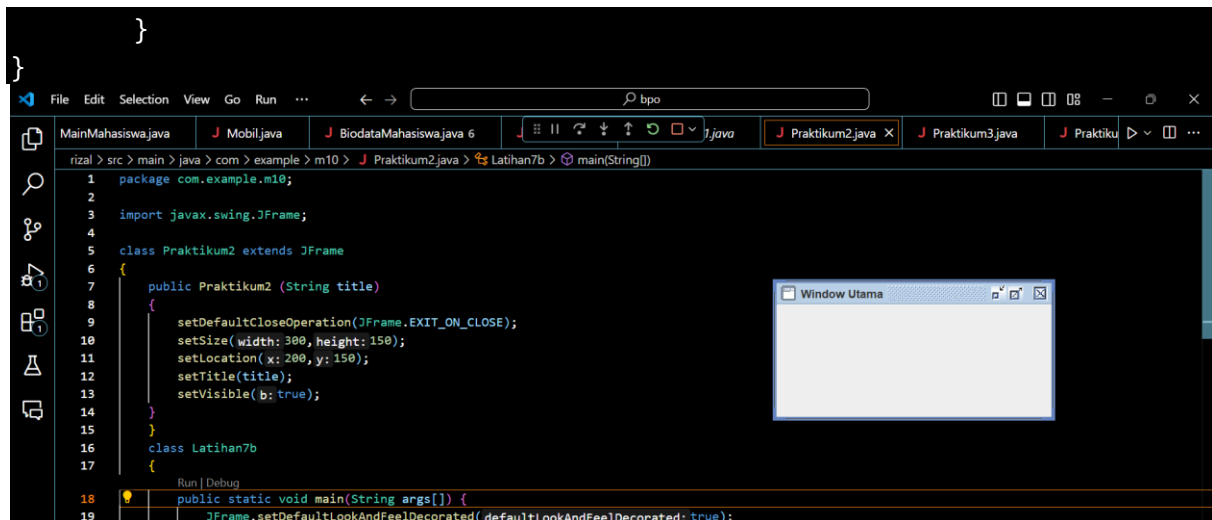## PRAKTIKUM 2

```java
package com.example.m10;

import javax.swing.JFrame;

class Praktikum2 extends JFrame
{
    public Praktikum2 (String title)
    {
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setSize(300,150);
        setLocation(200,150);
        setTitle(title);
        setVisible(true);
    }
    }
    class Latihan7b
    {
        public static void main(String args[]) {
            JFrame.setDefaultLookAndFeelDecorated(true);
            new Praktikum2("Window Utama");
```
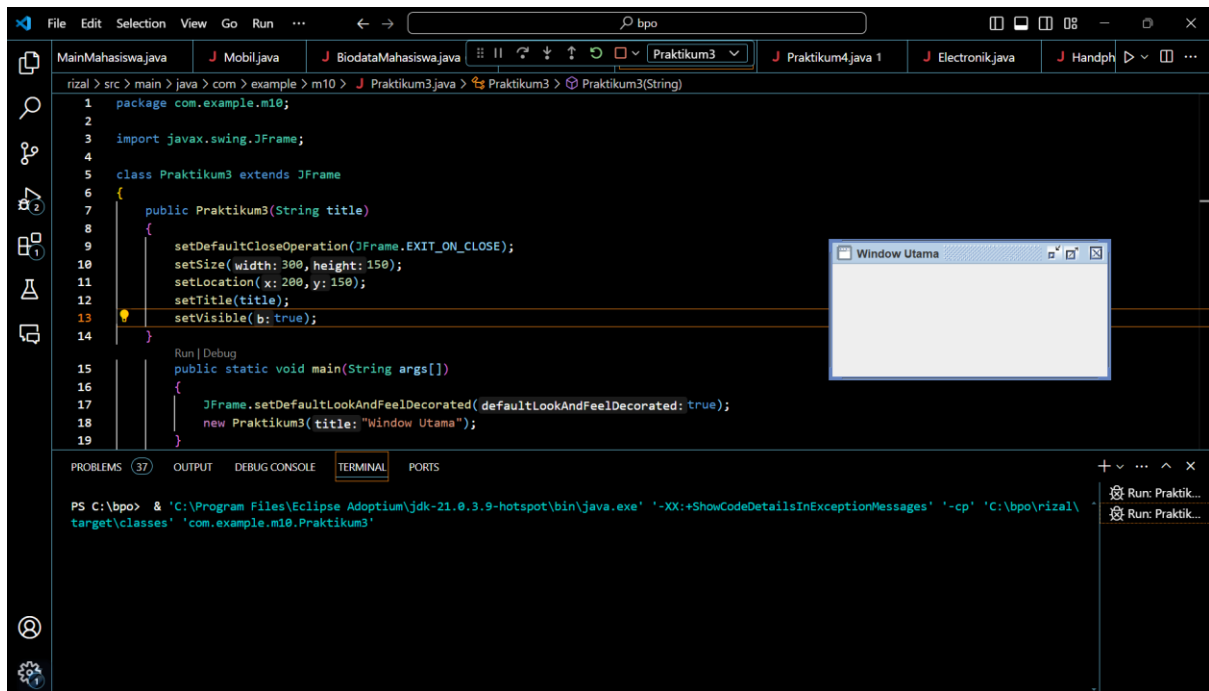
PRAKTIKUM 3

```java
package com.example.m10;

import javax.swing.JFrame;

class Praktikum3 extends JFrame
{
    public Praktikum3(String title)
    {
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setSize(300,150);
        setLocation(200,150);
        setTitle(title);
        setVisible(true);
    }

        public static void main(String args[])
        {
            JFrame.setDefaultLookAndFeelDecorated(true);
            new Praktikum3("Window Utama");
        }
}
```
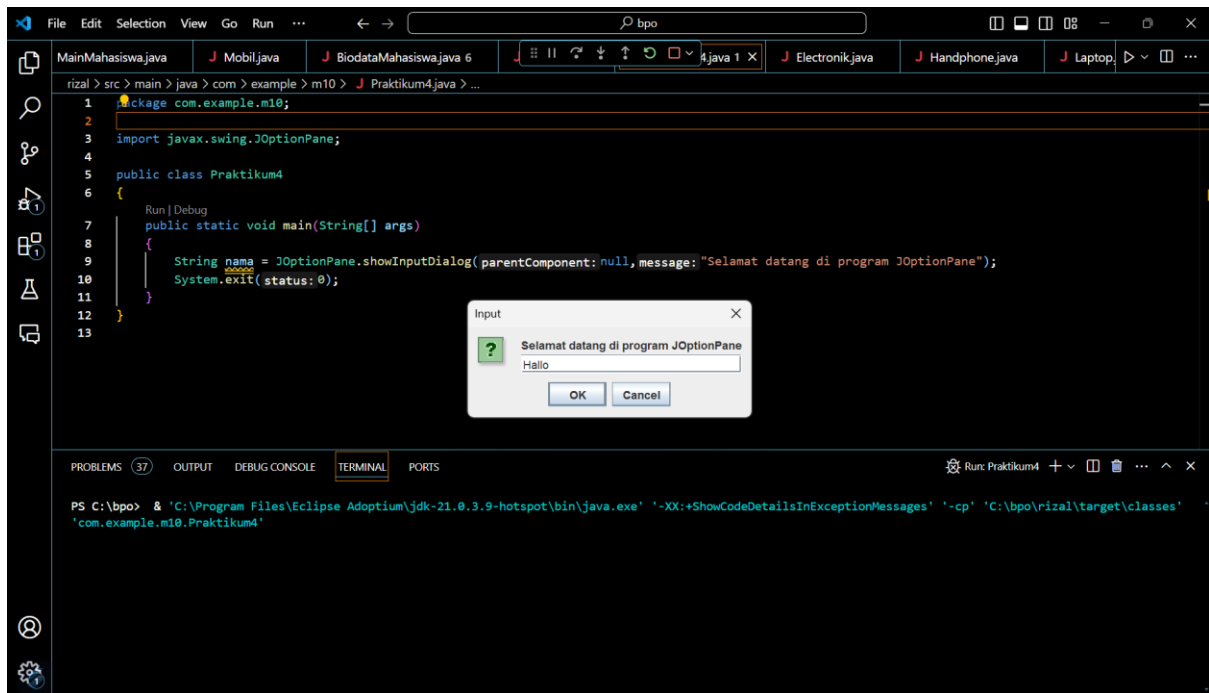
PRAKTIKUM 4

```java
package com.example.m10;

import javax.swing.JOptionPane;

public class Praktikum4
{
    public static void main(String[] args)
    {
        String nama = JOptionPane.showInputDialog(null,"Selamat datang di
program JOptionPane");
        System.exit(0);
    }
}
```

POSTTEST

1. Buatlah program GUI dengan mengimplementasikan komponen JFrameForm, JLabel, JTextField, dan JButton.

```java
package com.example.m10;

import java.awt.GridLayout;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import javax.swing.JButton;
import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.JTextField;

public class Mobil extends JFrame {
    private JLabel merekLabel;
    private JLabel modelLabel;
    private JLabel typeLabel;
    private JLabel kecepatanLabel;
    private JTextField merekText;
    private JTextField modelText;
    private JTextField typeText;
    private JTextField kecepatanText;
    private JButton tombolSubmit;
    private JLabel hasilLabel;

    public Mobil() {
```

```java
        setTitle("Informasi Mobil");
        setSize(300, 200);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setLayout(new GridLayout(5, 2));

        merekLabel = new JLabel(" Merek :");
        modelLabel = new JLabel(" Model :");
        typeLabel = new JLabel(" Type :");
        kecepatanLabel = new JLabel(" Kecepatan(CC) :");
        merekText = new JTextField();
        modelText = new JTextField();
        typeText = new JTextField();
        kecepatanText = new JTextField();
        tombolSubmit = new JButton("Submit");
        hasilLabel = new JLabel("");

        add(merekLabel);
        add(merekText);
        add(modelLabel);
        add(modelText);
        add(typeLabel);
        add(typeText);
        add(kecepatanLabel);
        add(kecepatanText);
        add(tombolSubmit);
        add(hasilLabel);

        tombolSubmit.addActionListener(new ActionListener() {
            public void actionPerformed(ActionEvent e) {
                String merek = merekText.getText();
                String model = modelText.getText();
                String type = typeText.getText();
                String kecepatan = kecepatanText.getText();
                hasilLabel.setText("Mobil Anda : " + merek + " " + model + " "
+ type + " " + kecepatan);
            }
        });
    }

    public static void main(String[] args) {
        Mobil form = new Mobil();
        form.setVisible(true);
    }
}
```
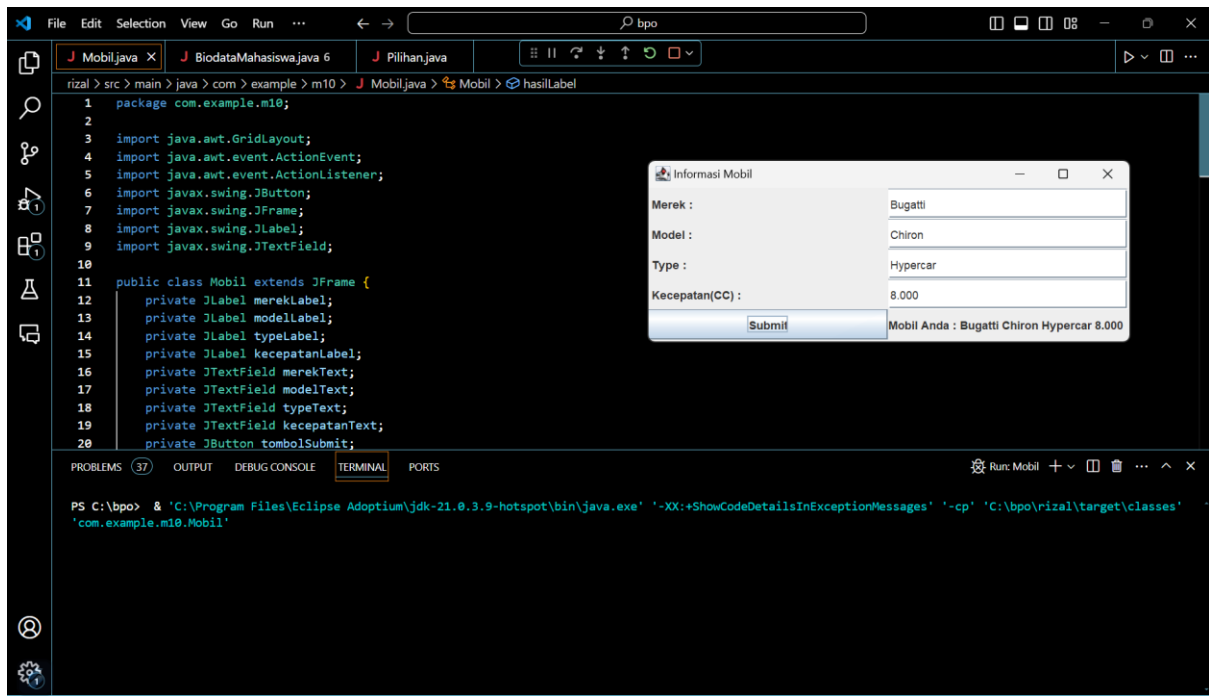
TUGAS INDIVIDU UNTUK MINGGU DEPAN

1.

```java
package com.example.m10;

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

public class BiodataMahasiswa extends JFrame {

    private JTextField fieldNIM, fieldNama;
    private JTextArea areaAlamat;
    private JRadioButton radioPria, radioWanita;
    private JComboBox<String> comboFakultas, comboProdi;
    private JButton tombolSimpan, tombolBacaData, tombolKeluar;

    public BiodataMahasiswa() {
        inisialisasiKomponen();
        aturLayout();
        aksi();
        setTitle("Formulir Biodata Mahasiswa");
        setSize(400, 400);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setVisible(true);
    }
```

```java
    private void inisialisasiKomponen() {
        JLabel labelNIM = new JLabel("NIM");
        JLabel labelNama = new JLabel("Nama");
        JLabel labelAlamat = new JLabel("Alamat");
        JLabel labelJenisKelamin = new JLabel("Jenis Kelamin");
        JLabel labelFakultas = new JLabel("Fakultas");
        JLabel labelProdi = new JLabel("Program Studi");

        fieldNIM = new JTextField(20);
        fieldNama = new JTextField(20);
        areaAlamat = new JTextArea(5, 20);
        radioPria = new JRadioButton("Pria");
        radioWanita = new JRadioButton("Wanita");
        ButtonGroup grupJenisKelamin = new ButtonGroup();
        grupJenisKelamin.add(radioPria);
        grupJenisKelamin.add(radioWanita);

        String[] opsiFakultas = {"Ilmu Komputer", "Pendidikan Guru Sekolah
Dasar", "Hukum", "Kehutanan"};
        comboFakultas = new JComboBox<>(opsiFakultas);
        String[] opsiProdi = {"Sistem Informasi", "Teknik Informatika",
"Desain Komunikasi Visual", "Managemen Informatika"};
        comboProdi = new JComboBox<>(opsiProdi);

        tombolSimpan = new JButton("Simpan");
        tombolBacaData = new JButton("Baca Data");
        tombolKeluar = new JButton("Keluar");
    }

    private void aturLayout() {
        setLayout(new GridBagLayout());
        GridBagConstraints gbc = new GridBagConstraints();
        gbc.insets = new Insets(5, 5, 5, 5);
        gbc.fill = GridBagConstraints.HORIZONTAL;

        gbc.gridx = 0; gbc.gridy = 0;
        add(new JLabel("NIM"), gbc);
        gbc.gridx = 1; gbc.gridy = 0;
        add(fieldNIM, gbc);

        gbc.gridx = 0; gbc.gridy = 1;
        add(new JLabel("Nama"), gbc);
        gbc.gridx = 1; gbc.gridy = 1;
        add(fieldNama, gbc);

        gbc.gridx = 0; gbc.gridy = 2;
        add(new JLabel("Alamat"), gbc);
```

```java
        gbc.gridx = 1; gbc.gridy = 2;
        gbc.gridheight = 3;
        add(new JScrollPane(areaAlamat), gbc);
        gbc.gridheight = 1;

        gbc.gridx = 0; gbc.gridy = 5;
        add(new JLabel("Jenis Kelamin"), gbc);
        gbc.gridx = 1; gbc.gridy = 5;
        add(radioPria, gbc);
        gbc.gridx = 2; gbc.gridy = 5;
        add(radioWanita, gbc);

        gbc.gridx = 0; gbc.gridy = 6;
        add(new JLabel("Fakultas"), gbc);
        gbc.gridx = 1; gbc.gridy = 6;
        add(comboFakultas, gbc);

        gbc.gridx = 0; gbc.gridy = 7;
        add(new JLabel("Program Studi"), gbc);
        gbc.gridx = 1; gbc.gridy = 7;
        add(comboProdi, gbc);

        gbc.gridx = 0; gbc.gridy = 8;
        add(tombolSimpan, gbc);
        gbc.gridx = 1; gbc.gridy = 8;
        add(tombolBacaData, gbc);
        gbc.gridx = 2; gbc.gridy = 8;
        add(tombolKeluar, gbc);
    }

    private void aksi() {
        tombolSimpan.addActionListener(new ActionListener() {
            public void actionPerformed(ActionEvent e) {
                JOptionPane.showMessageDialog(null, "Data disimpan");
            }
        });
        tombolBacaData.addActionListener(new ActionListener() {
            public void actionPerformed(ActionEvent e) {
                StringBuilder data = new StringBuilder();
                data.append("  Biodata Mahasiswa\n");
                data.append("===================\n");
                data.append(String.format("NIM           : %s\n",
fieldNIM.getText()));
                data.append(String.format("Nama          : %s\n",
fieldNama.getText()));
                data.append(String.format("Alamat        : %s\n",
areaAlamat.getText()));
                data.append(String.format("Jenis Kelamin : %s\n",
```

```java
radioPria.isSelected() ? "Pria" : "Wanita"));
                data.append(String.format("Fakultas      : %s\n",
comboFakultas.getSelectedItem()));
                data.append(String.format("Program Studi : %s\n",
comboProdi.getSelectedItem()));

                JOptionPane.showMessageDialog(null, data.toString(), "Data
Mahasiswa", JOptionPane.INFORMATION_MESSAGE);
            }
        });
        tombolKeluar.addActionListener(new ActionListener() {
            public void actionPerformed(ActionEvent e) {
                System.exit(0);
            }
        });
    }

    public static void main(String[] args) {
        new BiodataMahasiswa();
    }
}
```

Formulir Biodata Mahasiswa

NIM	20230810088
Nama	Muhammad Rizal Nurfirdaus
Alamat	Desa Sidaraja

Jenis Kelamin ◉ Pria ○ Wanita

Fakultas Ilmu Komputer ▼

Program Studi Teknik Informatika ▼

[**Simpan**] [**Baca Data**] [**Keluar**]

Data Mahasiswa

Biodata Mahasiswa

====================

NIM   : 20230810088

Nama   : Muhammad Rizal Nurfirdaus

Alamat   : Desa Sidaraja

Jenis Kelamin : Pria

Fakultas   : Ilmu Komputer

Program Studi : Teknik Informatika

OK

Message

Data disimpan

OK