

KOMPUTER GRAFIK

UTS (PERTEMUAN 9 – 10)

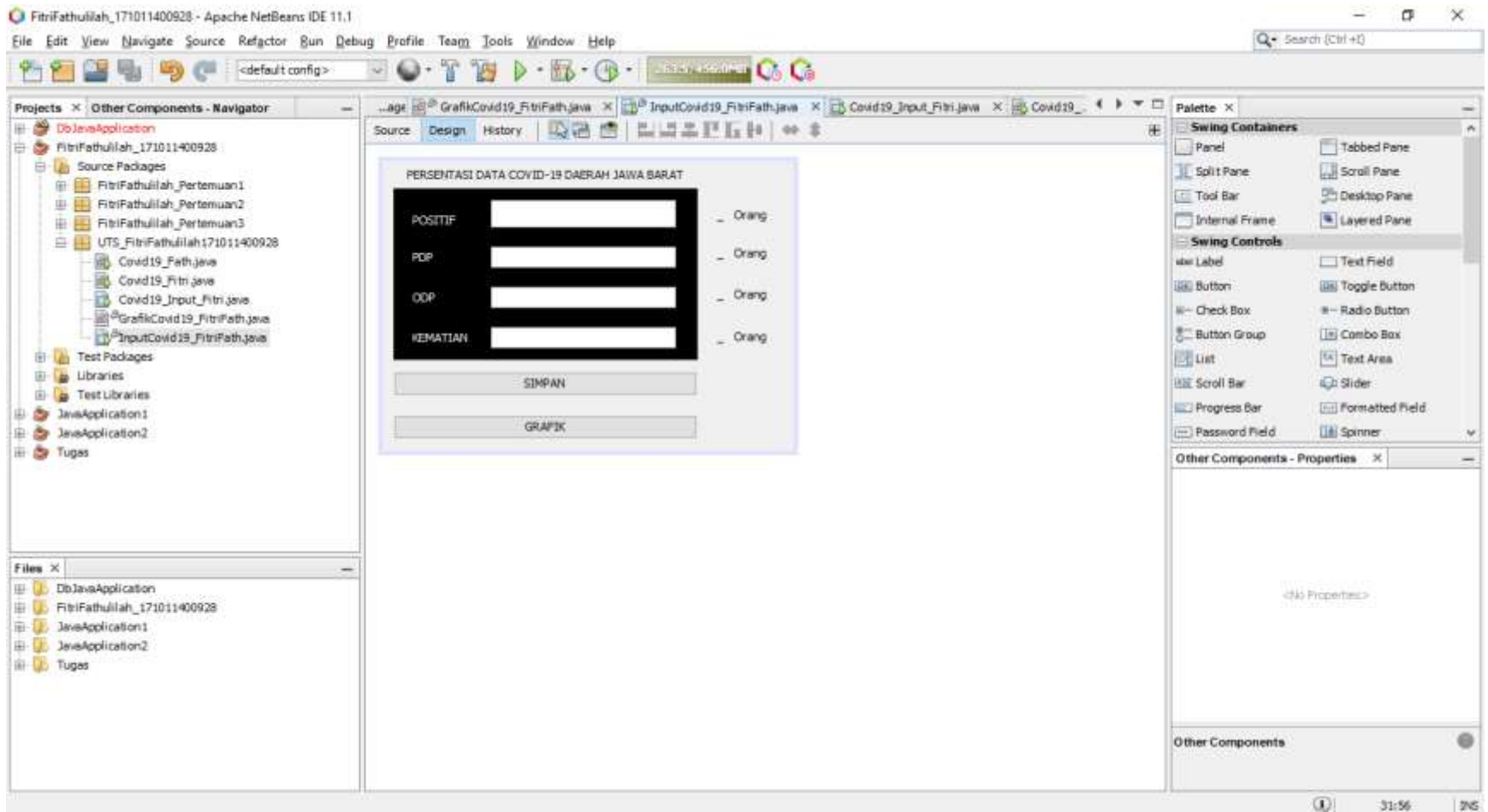
FITRI FATHULILAH

171011400928

06TPLE018



Buatlah JFrameForm dengan nama “InputCovid19_Nama”, dan desain sebagai berikut



Desain Sebagai Berikut

PERSENTASI DATA COVID-19 DAERAH JAWA BARAT

POSITIF	<input type="text"/>	_ Orang
PDP	<input type="text"/>	_ Orang
ODP	<input type="text"/>	_ Orang
KEMATIAN	<input type="text"/>	_ Orang

Buatlah new java class dengan nama “GrafikCovid19_Nama”

New Java Class

Steps

1. Choose File Type
2. **Name and Location**

Name and Location

Class Name: GrafikCovid19_FitriFat

Project: FitriFathulilah_171011400928

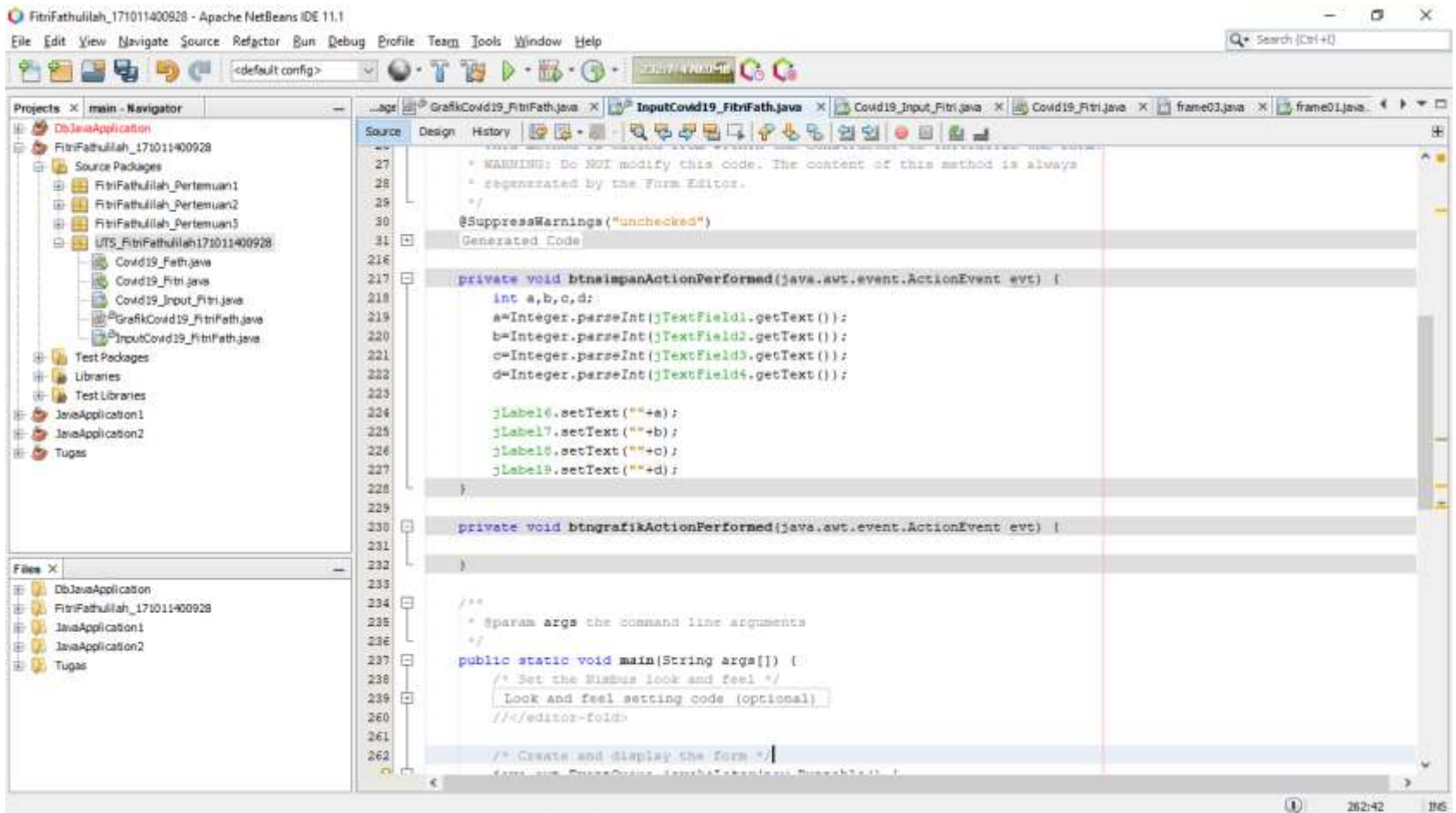
Location: Source Packages

Package: UTS_FitriFathulilah171011400928

Created File: ilah_171011400928\src\UTS_FitriFathulilah171011400928\GrafikCovid19_FitriFat.java

< Back Next > **Finish** Cancel Help

Pada class InputCovid19, masukkan source dibawah ini pada button Simpan



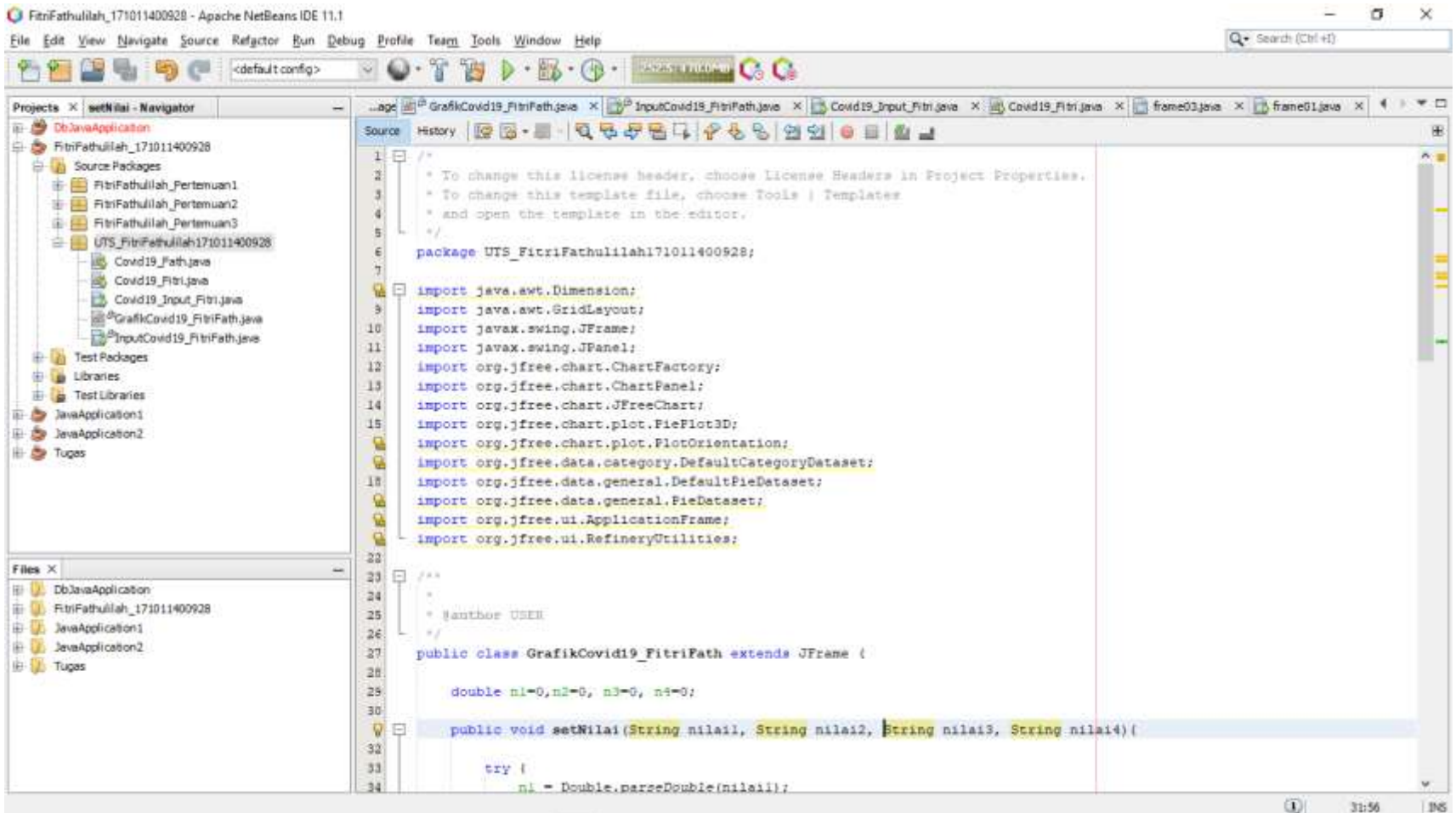
```
FitriFathulillah_171011400928 - Apache NetBeans IDE 11.1
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
<default config>
Projects x main - Navigator
  DbJavaApplication
  FitriFathulillah_171011400928
    Source Packages
      FitriFathulillah_Peremuan1
      FitriFathulillah_Peremuan2
      FitriFathulillah_Peremuan3
      UTS_FitriFathulillah171011400928
        Covid19_Fath.java
        Covid19_Fitri.java
        Covid19_Input_Fitri.java
        GrafikCovid19_FitriFath.java
        InputCovid19_FitriFath.java
    Test Packages
    Libraries
    Test Libraries
  JavaApplication1
  JavaApplication2
  Tugas
Files x
  DbJavaApplication
  FitriFathulillah_171011400928
  JavaApplication1
  JavaApplication2
  Tugas

Source Design History
InputCovid19_FitriFath.java x
  27 * WARNING: Do NOT modify this code. The content of this method is always
  28 * regenerated by the Form Editor.
  29 */
  30 @SuppressWarnings("unchecked")
  31 Generated Code
  216
  217 private void btnsimpanActionPerformed(java.awt.event.ActionEvent evt) {
  218     int a,b,c,d;
  219     a=Integer.parseInt(jTextField1.getText());
  220     b=Integer.parseInt(jTextField2.getText());
  221     c=Integer.parseInt(jTextField3.getText());
  222     d=Integer.parseInt(jTextField4.getText());
  223
  224     jLabel6.setText(""+a);
  225     jLabel7.setText(""+b);
  226     jLabel8.setText(""+c);
  227     jLabel9.setText(""+d);
  228 }
  229
  230 private void btngrafikActionPerformed(java.awt.event.ActionEvent evt) {
  231
  232 }
  233
  234 /**
  235  * @param args the command line arguments
  236  */
  237 public static void main(String args[]) {
  238     /* Set the Nimbus look and feel */
  239     LookAndFeelSettingCode(Optional);
  240     //</editor-fold>
  241
  242     /* Create and display the form */
  243     form1 = new InputCovid19_FitriFath();
  244     form1.setVisible(true);
  245 }
```

Pada class InputCovid19, masukkan source dibawah ini pada button Grafik

```
GrafikCovid19_FitriFath covid = new GrafikCovid19_FitriFath();  
covid.setNilai(jLabel6.getText(),jLabel7.getText(),jLabel8.getText(),  
    jLabel9.getText());  
  
covid.setVisible(true);
```

Pada class GrafikCovid19, masukkan struktur diagram pie, dan dapat dilihat sebagai berikut



```
FitriFathulilah_171011400928 - Apache NetBeans IDE 11.1
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
<default config>
Projects X setNilai - Navigator
  DbJavaApplication
  FitriFathulilah_171011400928
    Source Packages
      FitriFathulilah_Pertemuan1
      FitriFathulilah_Pertemuan2
      FitriFathulilah_Pertemuan3
      UTS_FitriFathulilah171011400928
        Covid19_Fath.java
        Covid19_Fitri.java
        Covid19_Input_Fitri.java
        GrafikCovid19_FitriPath.java
        InputCovid19_FitriPath.java
    Test Packages
    Libraries
    Test Libraries
  JavaApplication1
  JavaApplication2
  Tugas
Files X
  DbJavaApplication
  FitriFathulilah_171011400928
  JavaApplication1
  JavaApplication2
  Tugas
Source
1  /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6  package UTS_FitriFathulilah171011400928;
7
8
9  import java.awt.Dimension;
10 import java.awt.GridLayout;
11 import javax.swing.JFrame;
12 import javax.swing.JPanel;
13 import org.jfree.chart.ChartFactory;
14 import org.jfree.chart.ChartPanel;
15 import org.jfree.chart.JFreeChart;
16 import org.jfree.chart.plot.PiePlot3D;
17 import org.jfree.chart.plot.PlotOrientation;
18 import org.jfree.data.category.DefaultCategoryDataset;
19 import org.jfree.data.general.DefaultPieDataset;
20 import org.jfree.data.general.PieDataset;
21 import org.jfree.ui.ApplicationFrame;
22 import org.jfree.ui.RefineryUtilities;
23
24 /**
25  *
26  * @author USER
27  */
28 public class GrafikCovid19_FitriPath extends JFrame {
29
30     double n1=0,n2=0, n3=0, n4=0;
31
32     public void setNilai(String nilai1, String nilai2, String nilai3, String nilai4) {
33
34         try {
35             n1 = Double.parseDouble(nilai1);
36         } catch (NumberFormatException e) {
37             // Handle exception
38         }
39     }
40 }
```

Method untuk mengambil nilai di label6, label7, label8 dan label9 pada class GrafikInput

```
double f1=0,f2=0, f3=0, f4=0;
public void setNilai(String nilai1, String nilai2, String nilai3, String nilai4){

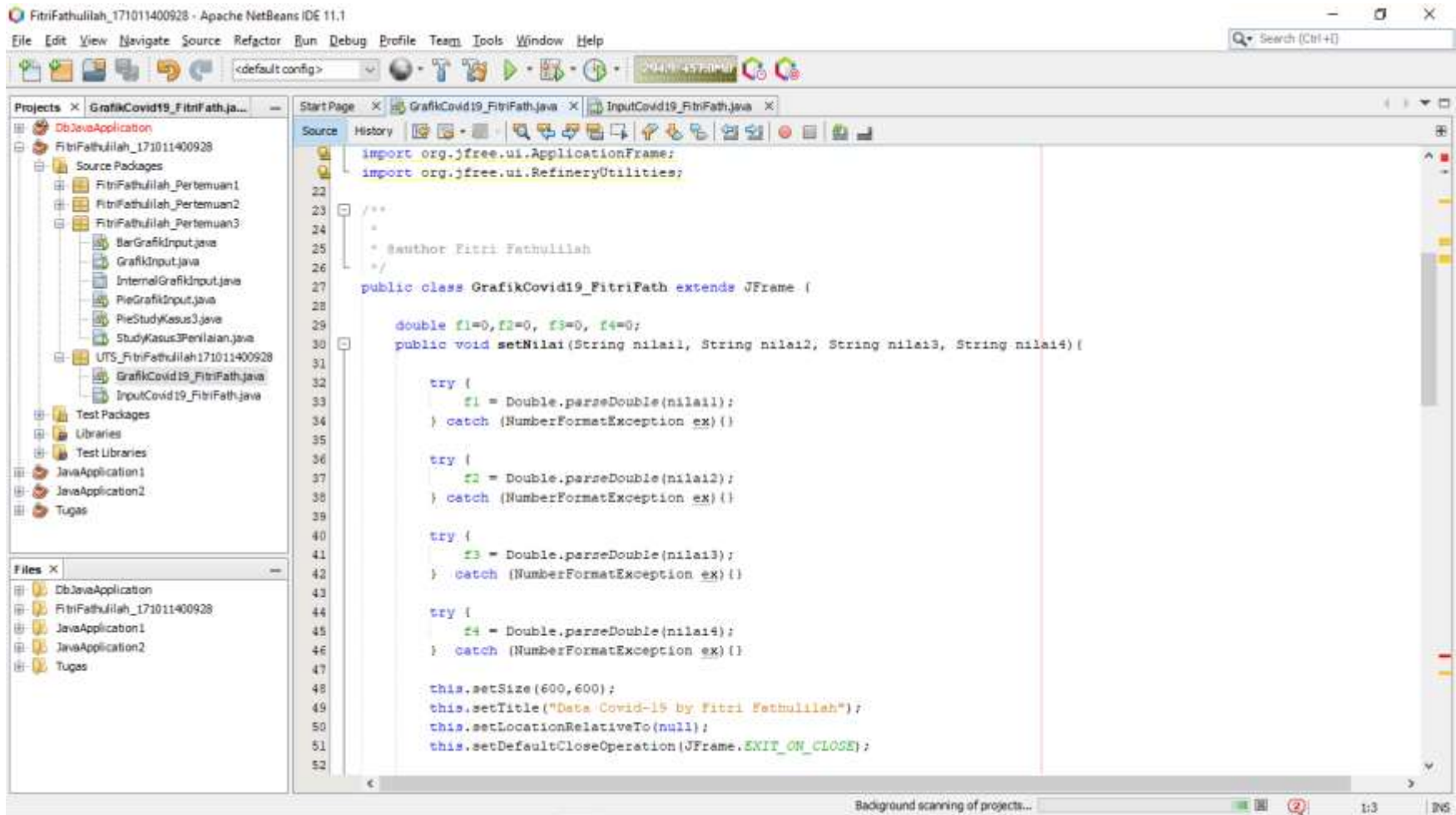
    try {
        f1 = Double.parseDouble(nilai1);
    } catch (NumberFormatException ex){}

    try {
        f2 = Double.parseDouble(nilai2);
    } catch (NumberFormatException ex){}

    try {
        f3 = Double.parseDouble(nilai3);
    } catch (NumberFormatException ex){}

    try {
        f4 = Double.parseDouble(nilai4);
    } catch (NumberFormatException ex){}
```


Dapat dilihat sebagai berikut



```
FitriFathulillah_171011400928 - Apache NetBeans IDE 11.1
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
<default config> 2049-4571PM
Projects x GrafikCovid19_FitriFath.java x InputCovid19_FitriFath.java x
DbJavaApplication
FitriFathulillah_171011400928
  Source Packages
    FitriFathulillah_Peremuan1
    FitriFathulillah_Peremuan2
    FitriFathulillah_Peremuan3
    BarGrafikInput.java
    GrafikInput.java
    InternalGrafikInput.java
    PieGrafikInput.java
    PieStudyKasus3.java
    StudyKasus3Penilaian.java
    UTS_FitriFathulillah171011400928
      GrafikCovid19_FitriFath.java
      InputCovid19_FitriFath.java
  Test Packages
  Libraries
  Test Libraries
JavaApplication1
JavaApplication2
Tugas
Files x
DbJavaApplication
FitriFathulillah_171011400928
JavaApplication1
JavaApplication2
Tugas

Source History
import org.jfree.ui.ApplicationFrame;
import org.jfree.ui.RefineryUtilities;

/**
 * @author Fitri Fathulillah
 */
public class GrafikCovid19_FitriFath extends JFrame {

    double f1=0, f2=0, f3=0, f4=0;
    public void setNilai(String nilai1, String nilai2, String nilai3, String nilai4) {

        try {
            f1 = Double.parseDouble(nilai1);
        } catch (NumberFormatException ex) {}

        try {
            f2 = Double.parseDouble(nilai2);
        } catch (NumberFormatException ex) {}

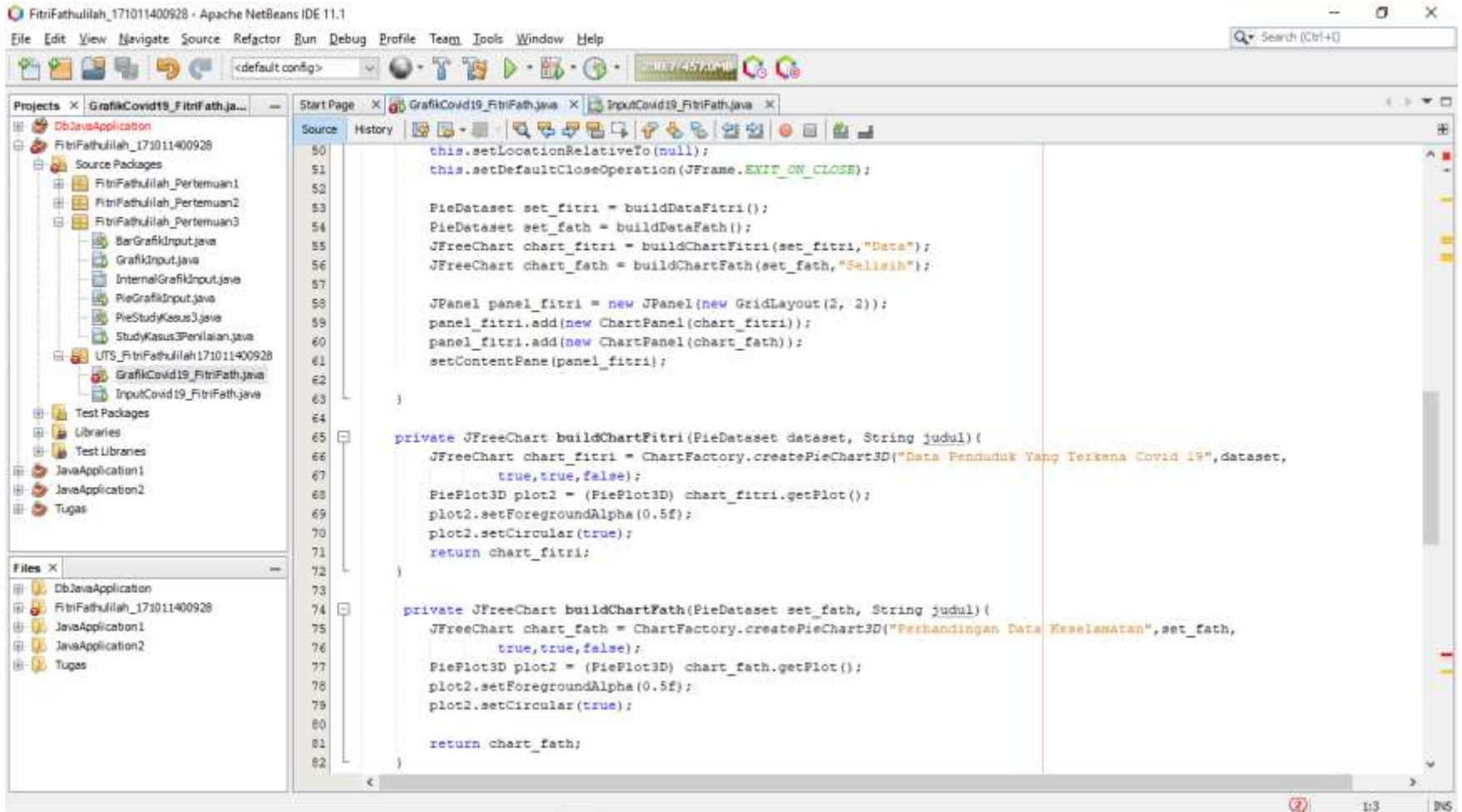
        try {
            f3 = Double.parseDouble(nilai3);
        } catch (NumberFormatException ex) {}

        try {
            f4 = Double.parseDouble(nilai4);
        } catch (NumberFormatException ex) {}

        this.setSize(600,600);
        this.setTitle("Data Covid-19 by Fitri Fathulillah");
        this.setLocationRelativeTo(null);
        this.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    }
}
```

Background scanning of projects... 1:3

Dapat dilihat sebagai berikut



The screenshot displays the Apache NetBeans IDE interface. The main editor window shows the source code for `InputCovid19_FitriFath.java`. The code includes the following elements:

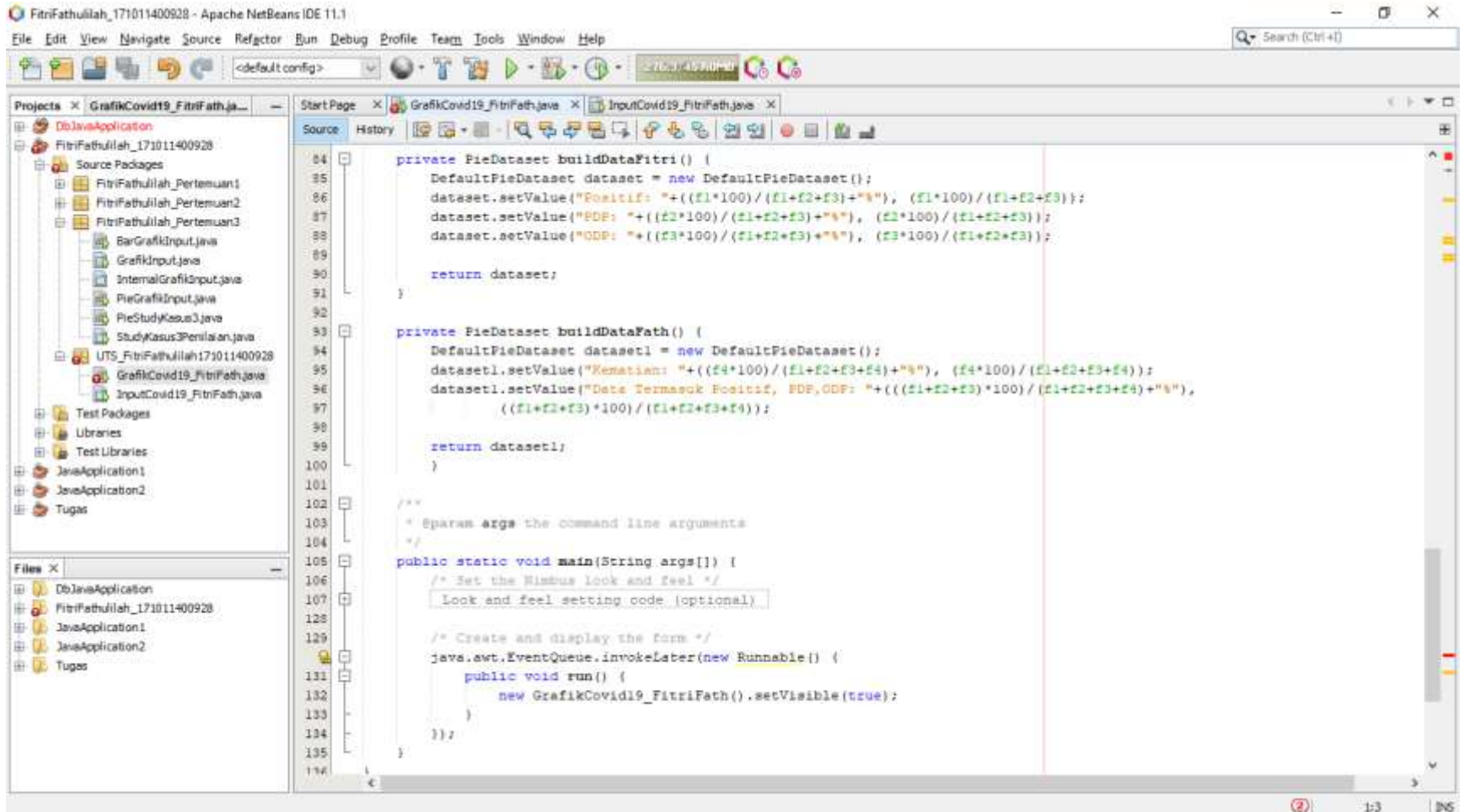
- Window configuration: `this.setLocationRelativeTo(null);` and `this.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);`
- Data and chart initialization:

```
PieDataset set_fitri = buildDataFitri();
PieDataset set_fath = buildDataFath();
JFreeChart chart_fitri = buildChartFitri(set_fitri, "Data");
JFreeChart chart_fath = buildChartFath(set_fath, "Selisih");
```
- UI layout:

```
JPanel panel_fitri = new JPanel(new GridLayout(2, 2));
panel_fitri.add(new ChartPanel(chart_fitri));
panel_fitri.add(new ChartPanel(chart_fath));
setContentPane(panel_fitri);
```
- Private methods:
 - `private JFreeChart buildChartFitri(PieDataset dataset, String judul)`: Creates a 3D pie chart titled "Data Penduduk Yang Terkena Covid 19" with a circular plot and 0.5f foreground alpha.
 - `private JFreeChart buildChartFath(PieDataset set_fath, String judul)`: Creates a 3D pie chart titled "Perbandingan Data Keselamatan" with a circular plot and 0.5f foreground alpha.

The IDE interface also shows a project tree on the left with packages like `FitriFathulilah_Peremuan1` through `Peremuan3`, and a files view at the bottom.

Dapat dilihat sebagai berikut



The screenshot displays the Apache NetBeans IDE interface. The main editor window shows the source code for `GrafikCovid19_FitriFath.java`. The code includes two methods for building pie chart datasets and a `main` method that sets up the application's look and feel and displays the form.

```
84 private PieDataset buildDataFitri() {
85     DefaultPieDataset dataset = new DefaultPieDataset();
86     dataset.setValue("Positif: "+((F1*100)/(F1+F2+F3)+"%"), (F1*100)/(F1+F2+F3));
87     dataset.setValue("RDP: "+((F2*100)/(F1+F2+F3)+"%"), (F2*100)/(F1+F2+F3));
88     dataset.setValue("ODP: "+((F3*100)/(F1+F2+F3)+"%"), (F3*100)/(F1+F2+F3));
89
90     return dataset;
91 }
92
93 private PieDataset buildDataFath() {
94     DefaultPieDataset dataset1 = new DefaultPieDataset();
95     dataset1.setValue("Kematian: "+((F4*100)/(F1+F2+F3+F4)+"%"), (F4*100)/(F1+F2+F3+F4));
96     dataset1.setValue("Data Termasuk Positif, RDP,ODP: "+((F1+F2+F3)*100)/(F1+F2+F3+F4)+"%",
97         ((F1+F2+F3)*100)/(F1+F2+F3+F4));
98
99     return dataset1;
100 }
101
102 /**
103  * Spares args the command line arguments
104  */
105 public static void main(String args[]) {
106     /* Set the Nimbus look and feel */
107     LookAndFeel lookAndFeel = new NimbusLookAndFeel();
108     lookAndFeel.installAll(true);
109     lookAndFeel.setDefaults(true);
110
111     /* Create and display the form */
112     java.awt.EventQueue.invokeLater(new Runnable() {
113         public void run() {
114             new GrafikCovid19_FitriFath().setVisible(true);
115         }
116     });
117 }
```

Running Program

The screenshot shows the Apache NetBeans IDE interface. The main window displays the source code for a Java application. The code includes imports for JFreeChart and Swing, and a public class named `GraphCovid19_FitriFath.java`. The code defines a `public class` with a `try` block that calls `Double.parseDouble(nilai3)`. A modal dialog box is overlaid on the code, titled "PERSENTASI DATA COVID-19 DAERAH JAWA BARAT". The dialog contains four input fields labeled POSITIF, POP, ODP, and KEMATIAN, each followed by a label "Orang". Below the input fields are two buttons: "SIMPAN" and "GRAFIK". The IDE's Output window at the bottom shows the following log:

```
Output - FitriFathullah_171011400928 (run)
[run]
Deleting: C:\Users\USER\Documents\NetBeansProjects\FitriFathullah_171011400928\build\build-jar.properties
[run]
Updating property file: C:\Users\USER\Documents\NetBeansProjects\FitriFathullah_171011400928\build\build-jar.properties
[run]
Compiling 2 source files to C:\Users\USER\Documents\NetBeansProjects\FitriFathullah_171011400928\build\classes
[run]
[run]
```

Hasil program, click Simpan akan menyimpan angka berdasarkan nilai yang diinput

PERSENTASI DATA COVID-19 DAERAH JAWA BARAT

POSITIF	<input type="text" value="20"/>	20 Orang
PDP	<input type="text" value="15"/>	15 Orang
ODP	<input type="text" value="7"/>	7 Orang
KEMATIAN	<input type="text" value="5"/>	5 Orang

SIMPAN

GRAFIK

Hasil selanjutnya, menampilkan Grafik

