

Laporan Hasil Praktikum Pemrograman Desktop



Tugas 5

ALYA AIMAN SALSABILA ARIF

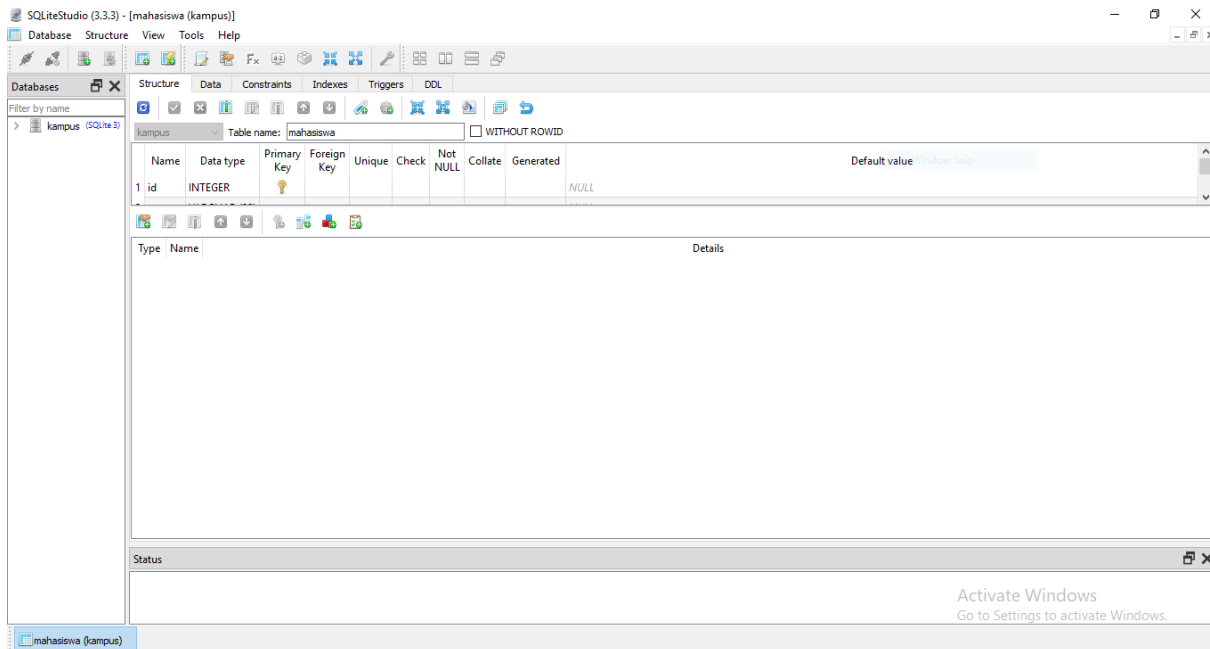
1817101379

Tingkat III Rekayasa Perangkat Lunak Kripto

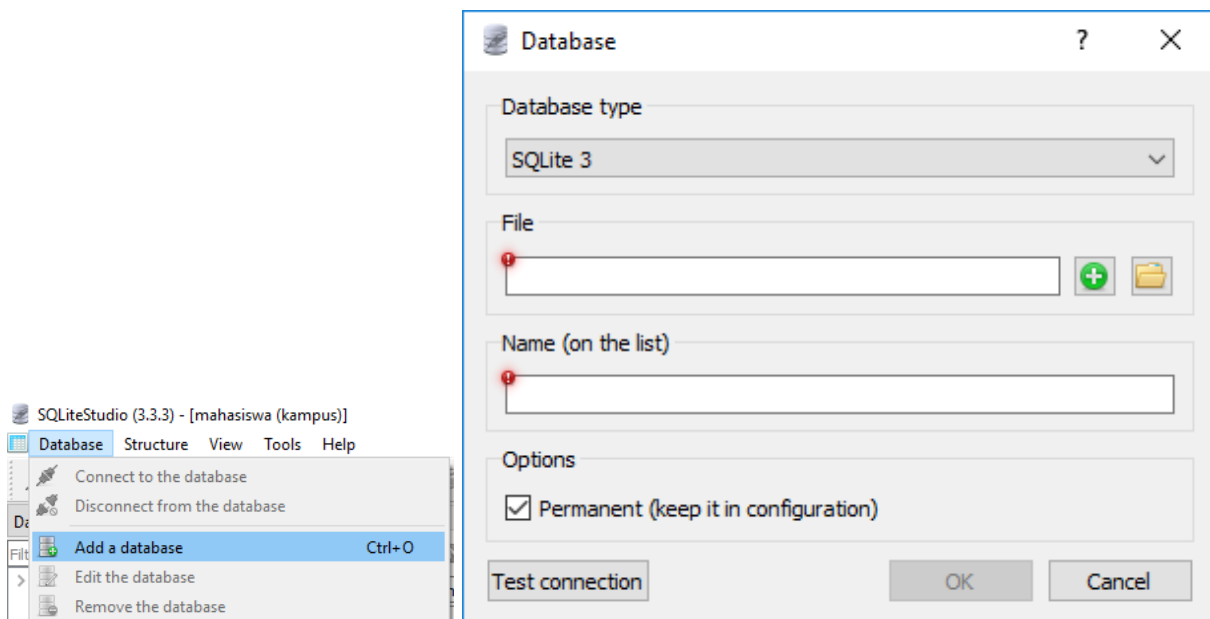
Politeknik Siber dan Sandi Negara

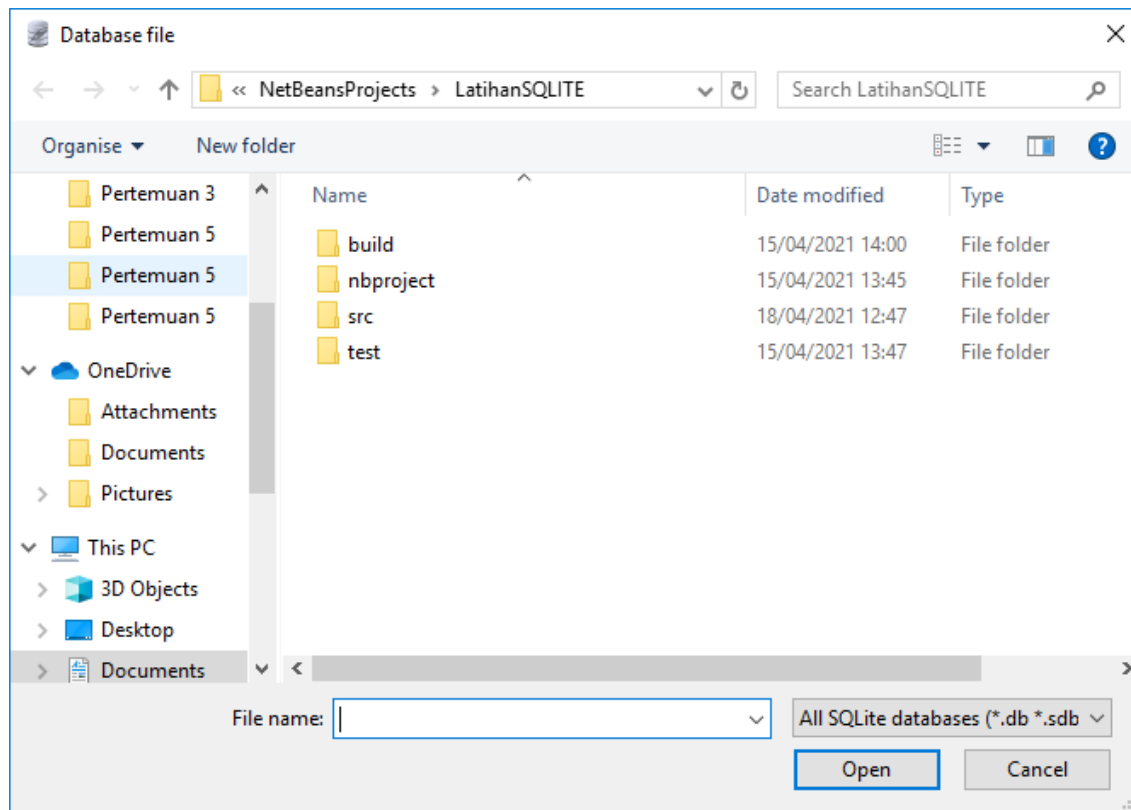
2020/2021

Jalankan sqlitestudio.exe

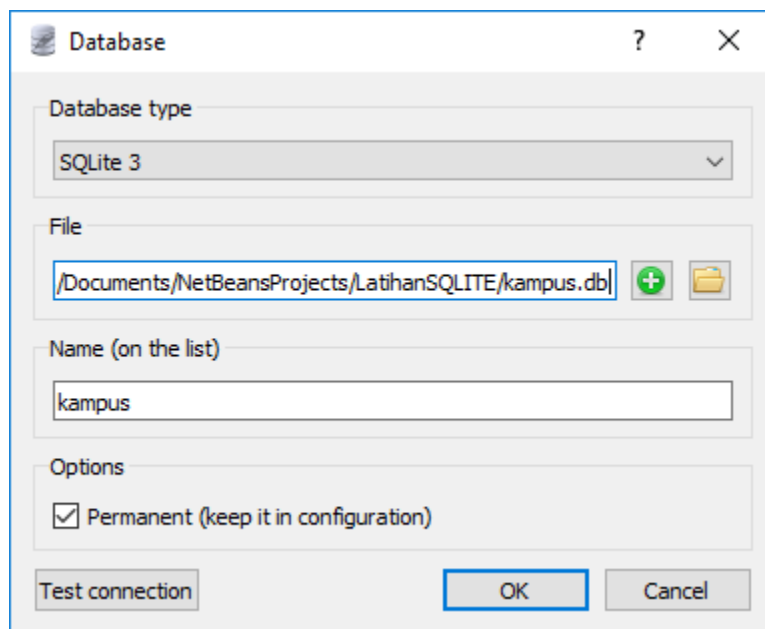


Buat projek baru dengan nama “LatihanSQLITE”. Buat basis data “kampus” dari sqlite dan letakkan di project java yang dibuat

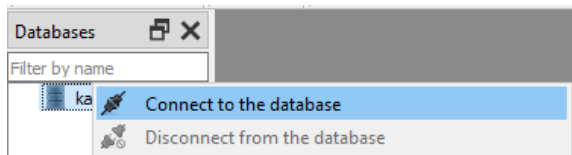




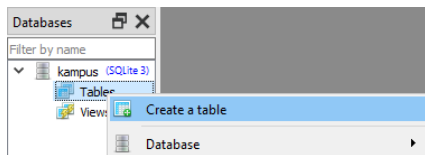
Setelah muncul seperti di bawah tekan OK



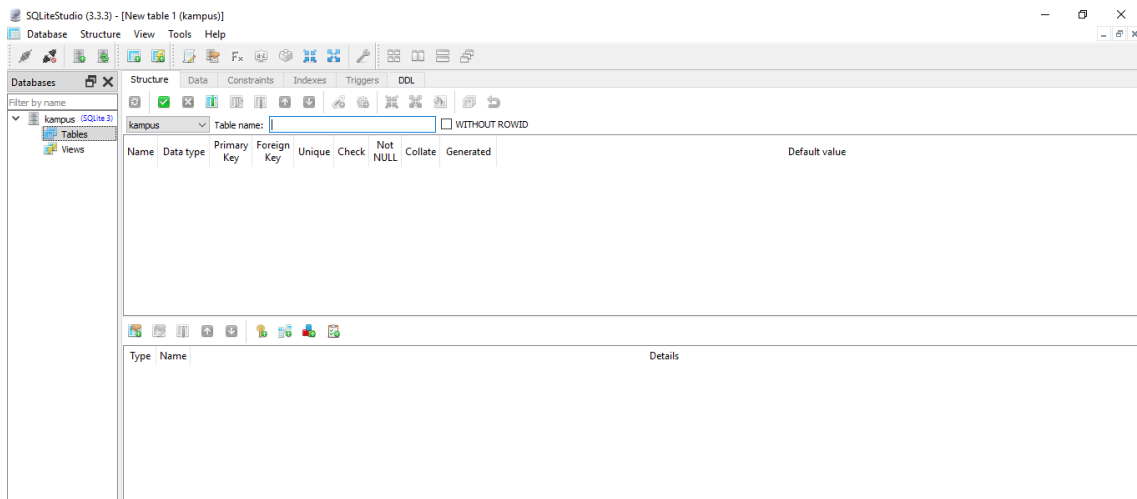
Klik kanan pada basis data tersebut dan klik *Connect to the database*

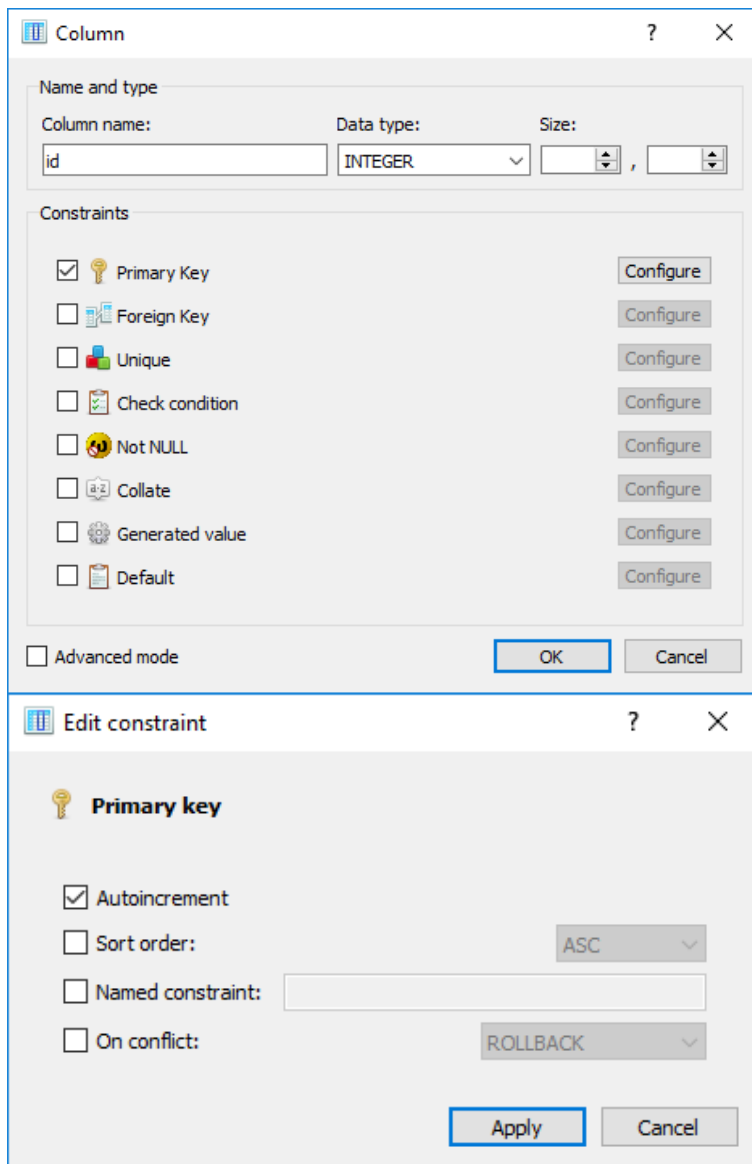


Buat tabel dengan cara klik kanan *Tables* dan klik *Create a table*



Isikan nama tabel misalkan “mahasiswa”, dilanjutkan *Add column*

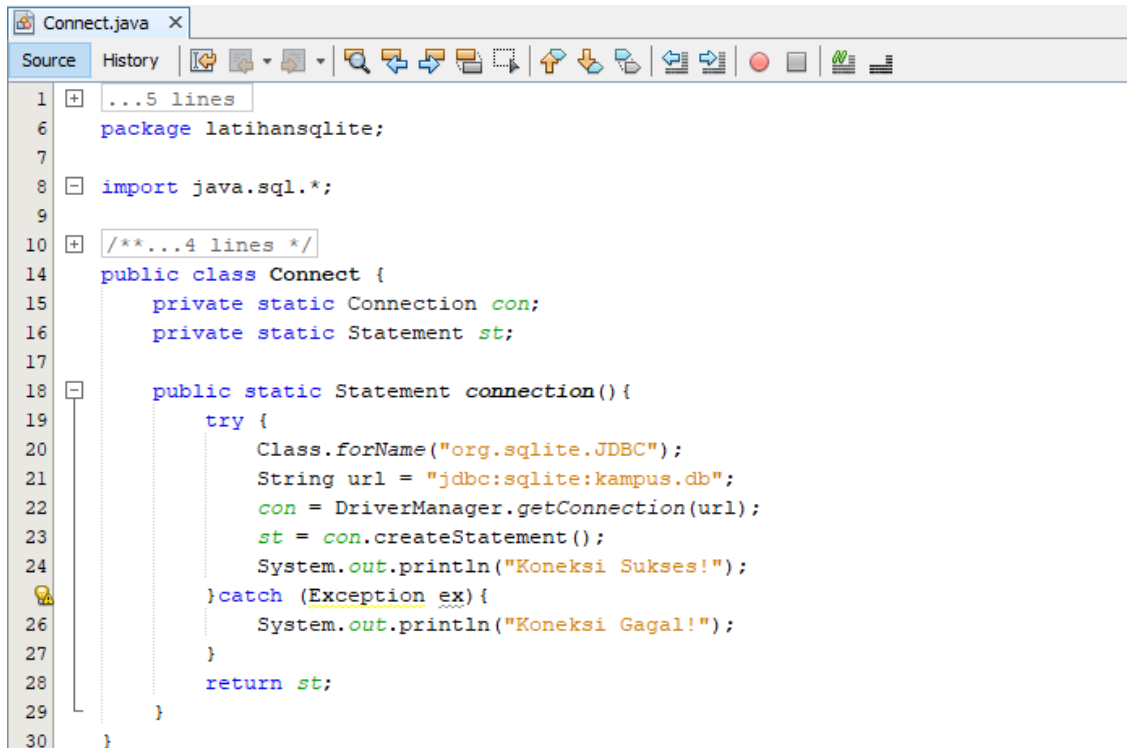




Setelah lengkap seperti gambar di bawah tekan tanda centang. Setelah diklik basis data dan tabel berhasil dibuat

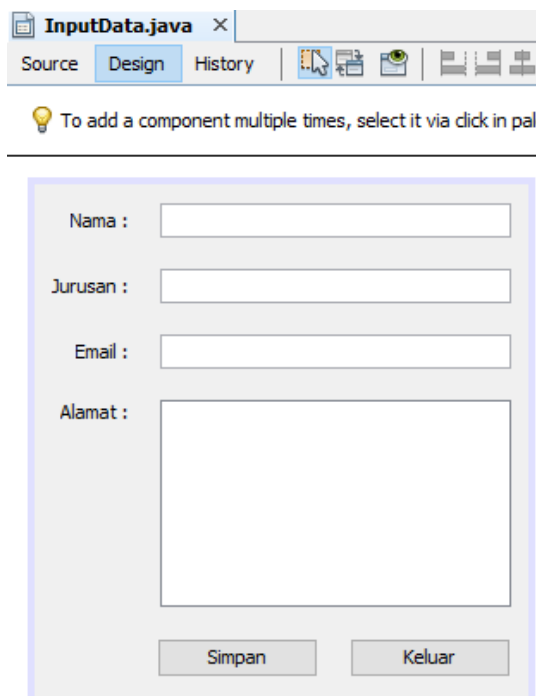
Databases									
Structure Data Constraints Indexes Triggers DDL									
Filter by name									
<div> <div>kampus (SQLite 3)</div> <div>Tables (1)</div> <div>mahasiswa</div> <div>Views</div> </div>									
<div> <div>kampus</div> <div>Table name: mahasiswa</div> <div><input type="checkbox"/> WITHOUT ROWID</div> </div>									
Name	Data type	Primary Key	Foreign Key	Unique	Check	Not NULL	Collate	Generated	Default value
1 id	INTEGER								NULL
2 nama	VARCHAR (20)								NULL
3 jurusan	VARCHAR (20)								NULL
4 email	VARCHAR (30)								NULL
5 alamat	TEXT								NULL

Kembali ke NetBeans dan buatlah kelas Connect. Masukkan *source code* sebagai berikut



```
1  ...5 lines
6  package latihansqlite;
7
8  import java.sql.*;
9
10 /**...4 lines */
14 public class Connect {
15     private static Connection con;
16     private static Statement st;
17
18     public static Statement connection(){
19         try {
20             Class.forName("org.sqlite.JDBC");
21             String url = "jdbc:sqlite:kampus.db";
22             con = DriverManager.getConnection(url);
23             st = con.createStatement();
24             System.out.println("Koneksi Sukses!");
25         } catch (Exception ex) {
26             System.out.println("Koneksi Gagal!");
27         }
28         return st;
29     }
30 }
```

Buatlah kelas InputData dengan menggunakan JFrame Form. Buatlah desain kelas InputData



InputData.java

Source Design History

To add a component multiple times, select it via click in pal

Nama :

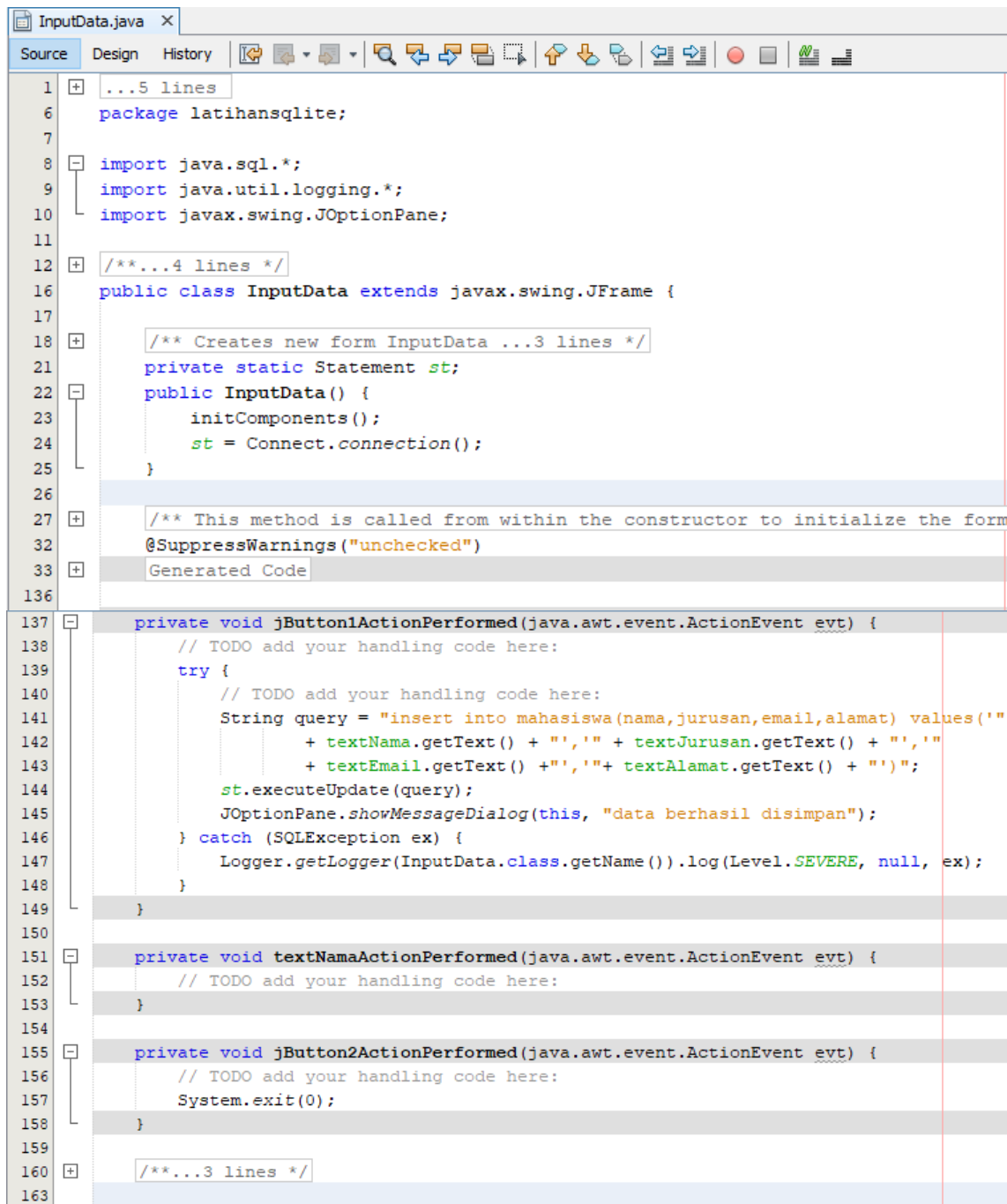
Jurusan :

Email :

Alamat :

Simpan Keluar

Masukkan *source code* sebagai berikut pada kelas InputData



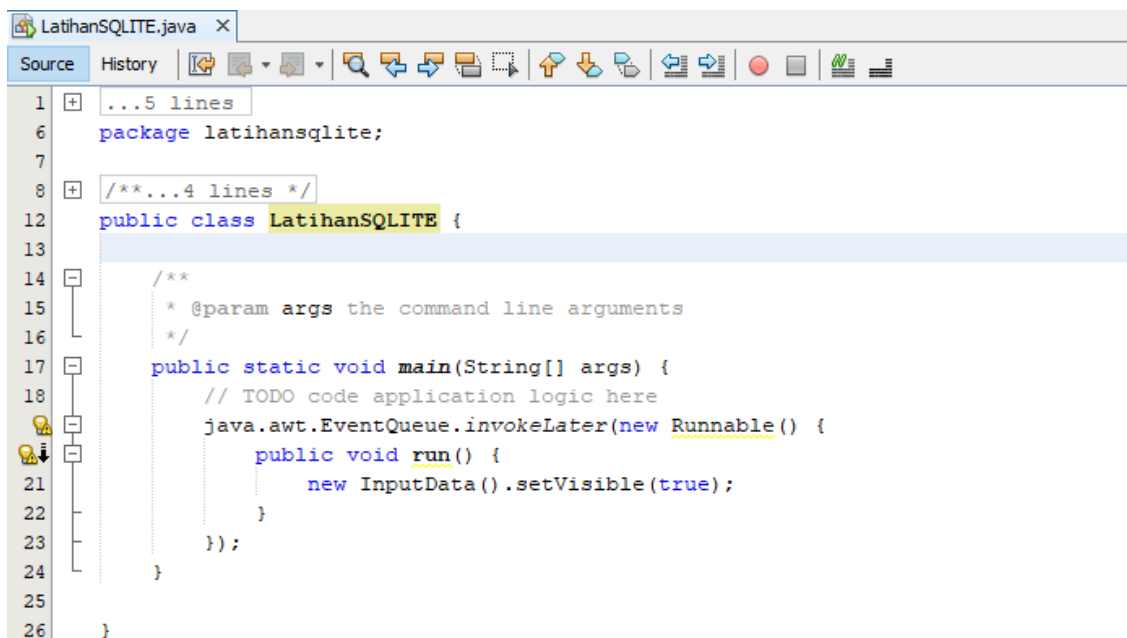
```
1  ...5 lines
6  package latihansqlite;
7
8  import java.sql.*;
9  import java.util.logging.*;
10 import javax.swing.JOptionPane;
11
12 /**...4 lines */
16 public class InputData extends javax.swing.JFrame {
17
18     /** Creates new form InputData ...3 lines */
21     private static Statement st;
22     public InputData() {
23         initComponents();
24         st = Connect.connection();
25     }
26
27     /** This method is called from within the constructor to initialize the form
32     @SuppressWarnings("unchecked")
33     Generated Code
136
137 private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
138     // TODO add your handling code here:
139     try {
140         // TODO add your handling code here:
141         String query = "insert into mahasiswa(nama,jurusan,email,alamat) values('"
142             + textNama.getText() + "','" + textJurusan.getText() + "','"
143             + textEmail.getText() + "','" + textAlamat.getText() + "')";
144         st.executeUpdate(query);
145         JOptionPane.showMessageDialog(this, "data berhasil disimpan");
146     } catch (SQLException ex) {
147         Logger.getLogger(InputData.class.getName()).log(Level.SEVERE, null, ex);
148     }
149 }
150
151 private void textNamaActionPerformed(java.awt.event.ActionEvent evt) {
152     // TODO add your handling code here:
153 }
154
155 private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
156     // TODO add your handling code here:
157     System.exit(0);
158 }
159
160 /**...3 lines */
163
```

```

164      // Variables declaration - do not modify
165      private javax.swing.JButton jButton1;
166      private javax.swing.JButton jButton2;
167      private javax.swing.JLabel jLabel1;
168      private javax.swing.JLabel jLabel2;
169      private javax.swing.JLabel jLabel3;
170      private javax.swing.JLabel jLabel4;
171      private javax.swing.JScrollPane jScrollPane1;
172      private javax.swing.JTextArea textAlamat;
173      private javax.swing.JTextField textEmail;
174      private javax.swing.JTextField textJurusan;
175      private javax.swing.JTextField textNama;
176      // End of variables declaration
177  }

```

Masukkan *source code* sebagai berikut pada kelas LatihanSQLITE

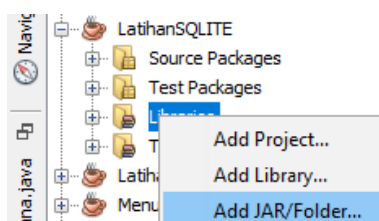


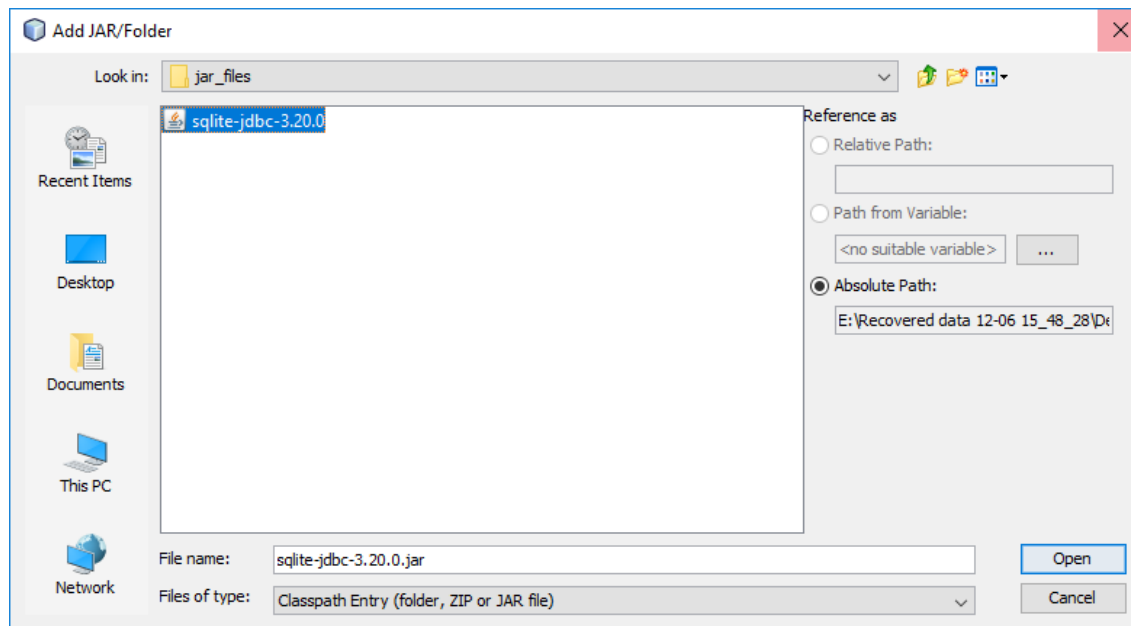
```

LatihanSQLITE.java x
Source History
1  ...5 lines
6  package latihansqlite;
7
8  /**...4 lines */
12 public class LatihanSQLITE {
13
14     /**
15      * @param args the command line arguments
16      */
17     public static void main(String[] args) {
18         // TODO code application logic here
19         java.awt.EventQueue.invokeLater(new Runnable() {
20             public void run() {
21                 new InputData().setVisible(true);
22             }
23         });
24     }
25
26 }

```

Tambahkan *library .jar*

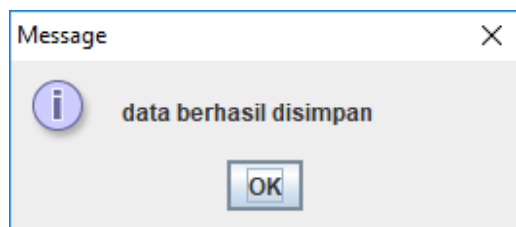




Jalankan program

A screenshot of a Java application window. It has four input fields: 'Nama' with 'Alya', 'Jurusan' with 'Jasa Perangkat Lunak Kripto', 'Email' with 'laarifalyaaiman@gmail.com', and 'Alamat' with 'Ciseeng'. At the bottom are two buttons: 'Sim...' and 'Keluar'.

Program akan menampilkan sebagai berikut



Jika tidak ada kesalahan, maka data bisa disimpan ke basis data

Structure Data Constraints Indexes Triggers DDL					
Grid view Form view					
Filter data Total rows loaded: 1					
id	nama	jurusan	email	alamat	
1	Alya	Rekayasa Perangkat Lunak Kripto	salsabilaarifalyaaiman@gmail.com	Ciseeng	

Ubah desain kelas InputData

InputData.java

Source Design History

To select multiple components in an area hold Shift and drag mouse over the co

id :

Search

Nama :

Jurusan :

Email :

Alamat :

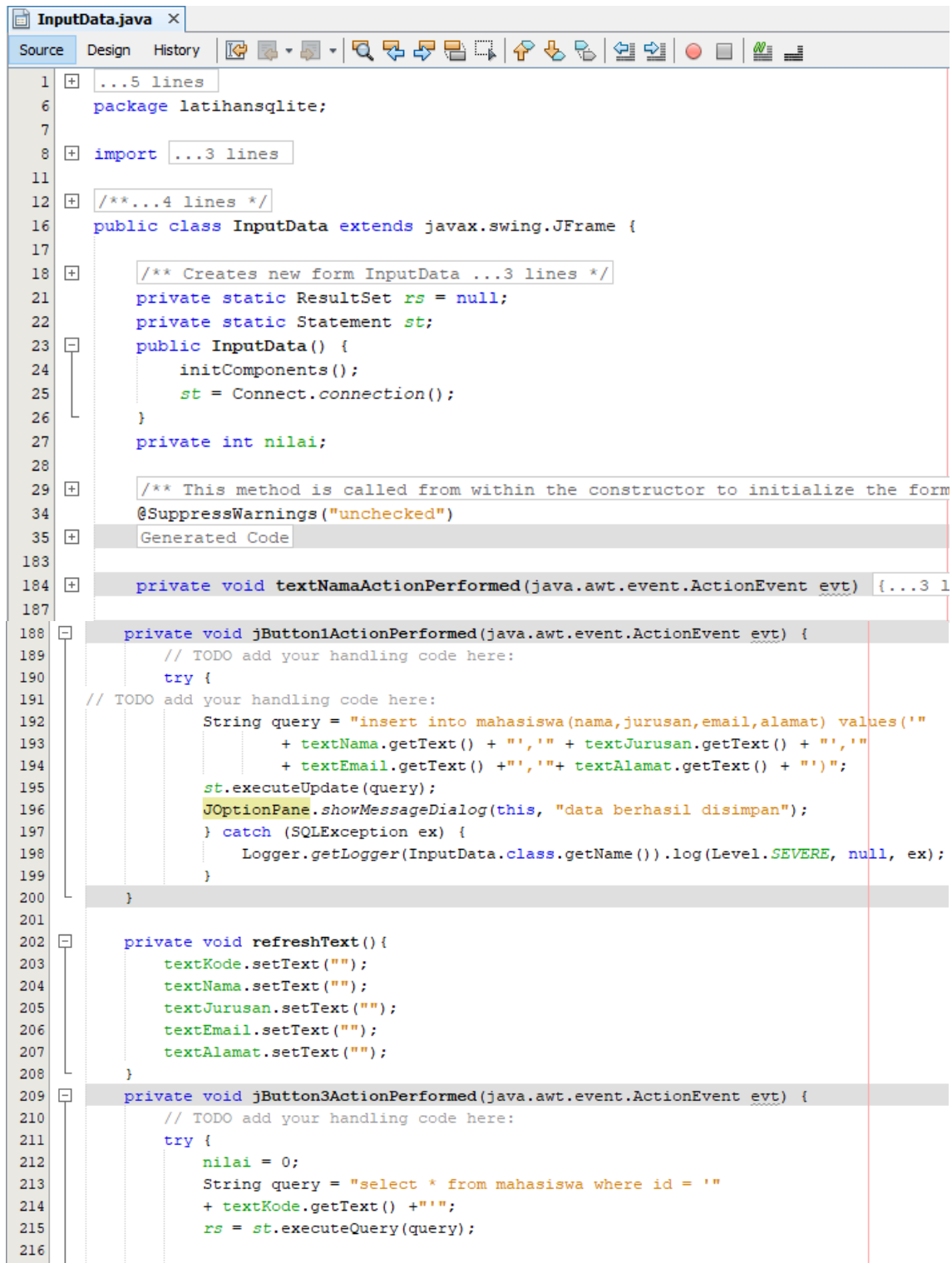
Simpan

Rubah

Hapus

Keluar

Masukkan *source code* sebagai berikut pada kelas InputData



```
1  ...5 lines
6  package latihansqlite;
7
8  import ...3 lines
11
12 /**...4 lines */
16 public class InputData extends javax.swing.JFrame {
17
18     /** Creates new form InputData ...3 lines */
21     private static ResultSet rs = null;
22     private static Statement st;
23     public InputData() {
24         initComponents();
25         st = Connect.connection();
26     }
27     private int nilai;
28
29     /** This method is called from within the constructor to initialize the form
34     @SuppressWarnings("unchecked")
35     Generated Code
183
184     private void textNamaActionPerformed(java.awt.event.ActionEvent evt) {...3 1
187
188     private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
189         // TODO add your handling code here:
190         try {
191             // TODO add your handling code here:
192             String query = "insert into mahasiswa (nama,jurusan,email,alamat) values ('"
193                 + textNama.getText() + "','" + textJurusan.getText() + "','"
194                 + textEmail.getText() + "','" + textAlamat.getText() + "')";
195             st.executeUpdate(query);
196             JOptionPane.showMessageDialog(this, "data berhasil disimpan");
197         } catch (SQLException ex) {
198             Logger.getLogger(InputData.class.getName()).log(Level.SEVERE, null, ex);
199         }
200     }
201
202     private void refreshText() {
203         textKode.setText("");
204         textNama.setText("");
205         textJurusan.setText("");
206         textEmail.setText("");
207         textAlamat.setText("");
208     }
209     private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
210         // TODO add your handling code here:
211         try {
212             nilai = 0;
213             String query = "select * from mahasiswa where id = '"
214                 + textKode.getText() + "'";
215             rs = st.executeQuery(query);
216
```

```

217         while (rs.next()){
218             nilai = nilai+1;
219             String nama = rs.getString("nama");
220             String jurusan = rs.getString("jurusan");
221             String email = rs.getString("email");
222             String alamat = rs.getString("alamat");
223             textNama.setText(nama);
224             textJurusan.setText(jurusan);
225             textEmail.setText(email);
226             textAlamat.setText(alamat);
227         }
228         if (nilai == 0){
229             JOptionPane.showMessageDialog(this, "tidak ada data");
230             refreshText();
231         }
232     }
233     catch (Exception e){
234     }
235 }
236
237 private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {
238     // TODO add your handling code here:
239     try {
240         // TODO add your handling code here:
241         String query = "update mahasiswa set nama = '"+
242             textNama.getText() + "',"
243             + "jurusan = '" + textJurusan.getText() + "',email = '" +
244             textEmail.getText() + "',alamat = '" + textAlamat.getText() + "' "
245             + "where id = '" + textKode.getText() + "'";
246         st.executeUpdate(query);
247         JOptionPane.showMessageDialog(this, "data berhasil dirubah");
248     } catch (SQLException ex) {
249         Logger.getLogger(InputData.class.getName()).log(Level.SEVERE, null, ex);
250     }
251 }
252
253 private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {
254     // TODO add your handling code here:
255     try {
256         // TODO add your handling code here:
257         JOptionPane.showMessageDialog(this, "delete from mahasiswa where id = '"
258             + textKode.getText() + "'");
259         String query = "delete from mahasiswa where id = '" +
260             textKode.getText() + "'";
261         st.executeUpdate(query);
262         JOptionPane.showMessageDialog(this, "data berhasil dihapus");
263     } catch (SQLException ex) {
264         Logger.getLogger(InputData.class.getName()).log(Level.SEVERE, null, ex);
265     }

```

```

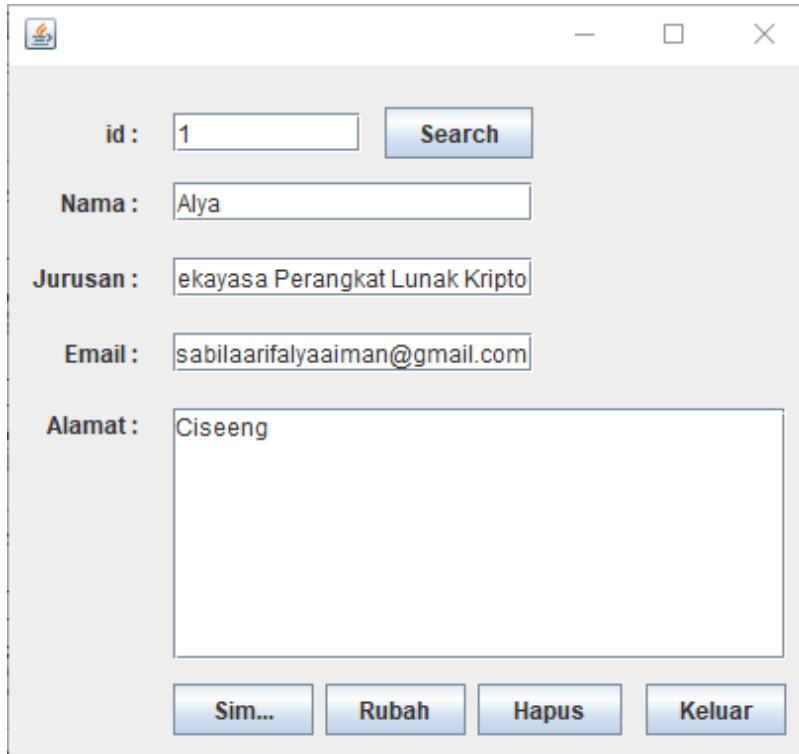
266     }
267
268     private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {
269         // TODO add your handling code here:
270         System.exit(0);
271     }
272
273     /**...3 lines */
274
275
276
277
278     // Variables declaration - do not modify
279     private javax.swing.JButton jButton1;
280     private javax.swing.JButton jButton2;
281     private javax.swing.JButton jButton3;
282     private javax.swing.JButton jButton4;
283     private javax.swing.JButton jButton5;
284     private javax.swing.JLabel jLabel1;
285     private javax.swing.JLabel jLabel2;
286     private javax.swing.JLabel jLabel3;
287     private javax.swing.JLabel jLabel4;
288     private javax.swing.JLabel jLabel5;
289     private javax.swing.JScrollPane jScrollPane1;
290     private javax.swing.JTextArea textAlamat;
291     private javax.swing.JTextField textEmail;
292     private javax.swing.JTextField textJurusan;
293     private javax.swing.JTextField textKode;
294     private javax.swing.JTextField textNama;
295     // End of variables declaration
296 }

```

Jalankan program, masukkan angka 1 dan tekan *button* Search

The screenshot shows a Java Swing application window with a light gray background. At the top, there is a title bar with standard window controls (minimize, maximize, close). Below the title bar, the text 'id : 1' is displayed next to a text input field containing the number '1'. To the right of this field is a blue button labeled 'Search'. Below the 'id' field, there are four more input fields, each preceded by a label: 'Nama', 'Jurusan', 'Email', and 'Alamat'. The 'Alamat' field is a larger text area. At the bottom of the window, there are four buttons arranged horizontally: 'Sim...', 'Rubah', 'Hapus', and 'Keluar'.

Program akan menampilkan sebagai berikut

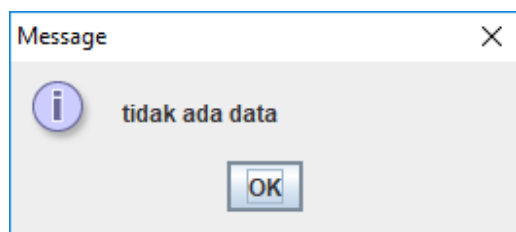


A screenshot of a Java Swing window with a light gray background. The window has a title bar with a small icon on the left and standard minimize, maximize, and close buttons on the right. The main area contains a form with the following elements:

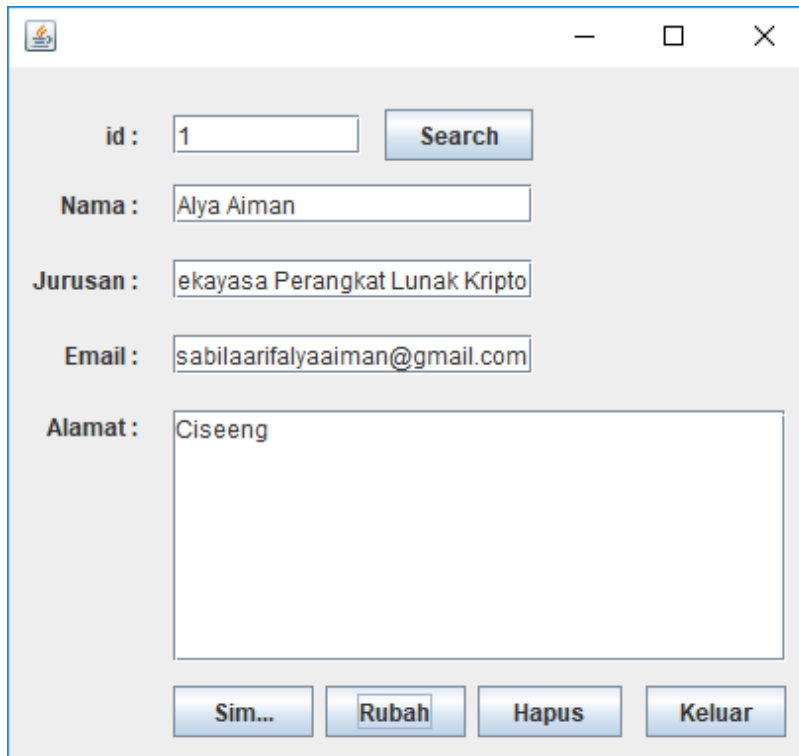
- id :** A text field containing the number "1". To its right is a blue button labeled "Search".
- Nama :** A text field containing the name "Alya".
- Jurusan :** A text field containing the text "ekayasa Perangkat Lunak Kripto".
- Email :** A text field containing the email address "sabilaarifalyaaiman@gmail.com".
- Alamat :** A large text area containing the text "Ciseeng".

At the bottom of the window, there are four blue buttons arranged horizontally: "Sim...", "Rubah", "Hapus", and "Keluar".

Saat data yang dimasukkan adalah data kosong, maka program akan menampilkan sebagai berikut

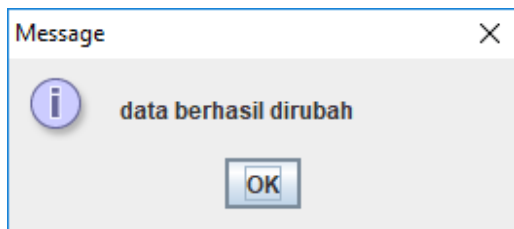


Untuk mengubah data, ubah teks yang terdapat di aplikasi dan klik *button* Rubah

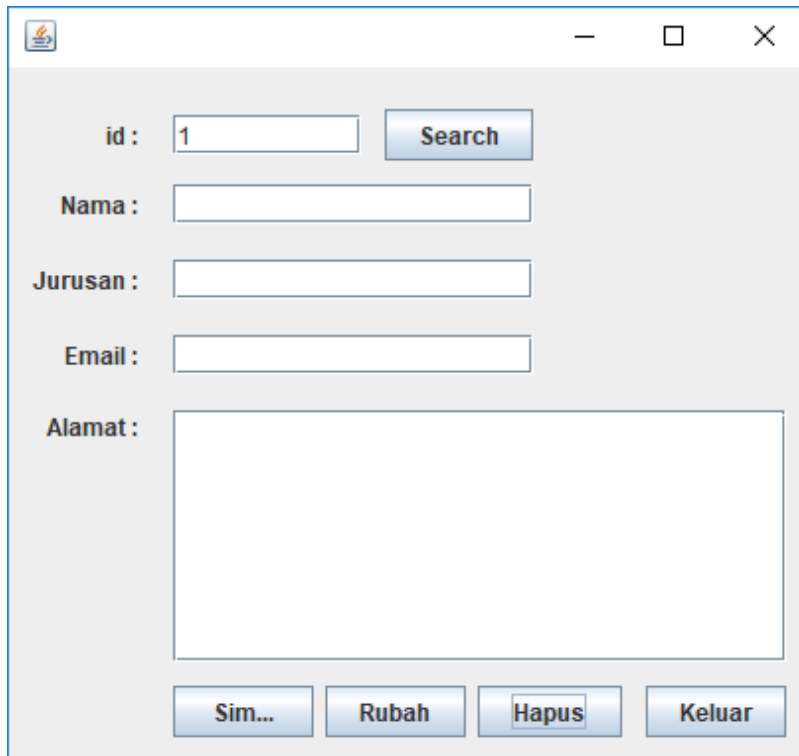


A screenshot of a Java Swing application window. The window has a title bar with a small icon on the left and standard minimize, maximize, and close buttons on the right. The main content area is light gray and contains several labeled text input fields: 'id : 1', 'Nama : Alya Aiman', 'Jurusan : ekayasa Perangkat Lunak Kripto', 'Email : sabilaarifalyaaiman@gmail.com', and 'Alamat : Ciseeng'. To the right of the 'id' field is a 'Search' button. At the bottom of the window, there are four buttons: 'Sim...', 'Rubah', 'Hapus', and 'Keluar'.

Program akan menampilkan sebagai berikut



Untuk menghapus dapat klik tombol *button* Hapus



The screenshot shows a window with a title bar containing a small icon and standard Windows window controls (minimize, maximize, close). The main area of the window is light gray and contains several input fields and buttons. At the top, there is a label 'id :' followed by a text box containing the number '1' and a 'Search' button. Below this are three more labels with corresponding text boxes: 'Nama :', 'Jurusan :', and 'Email :'. The 'Alamat :' label is followed by a larger text area. At the bottom of the window, there are four buttons: 'Sim...', 'Rubah', 'Hapus', and 'Keluar'.

Program akan menampilkan sebagai berikut

