Laporan Hasil Praktikum

Pemrograman Desktop

Tugas 5

ALYA AIMAN SALSABILA ARIF

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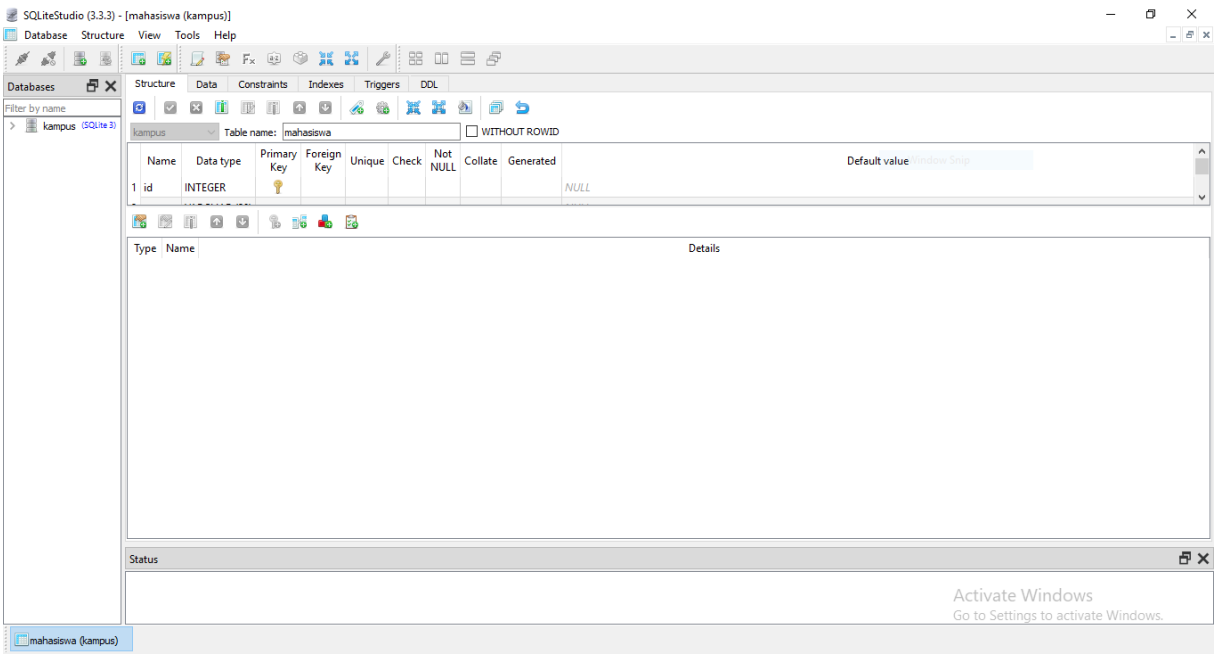
Tingkat III Rekayasa Perangkat Lunak Kripto

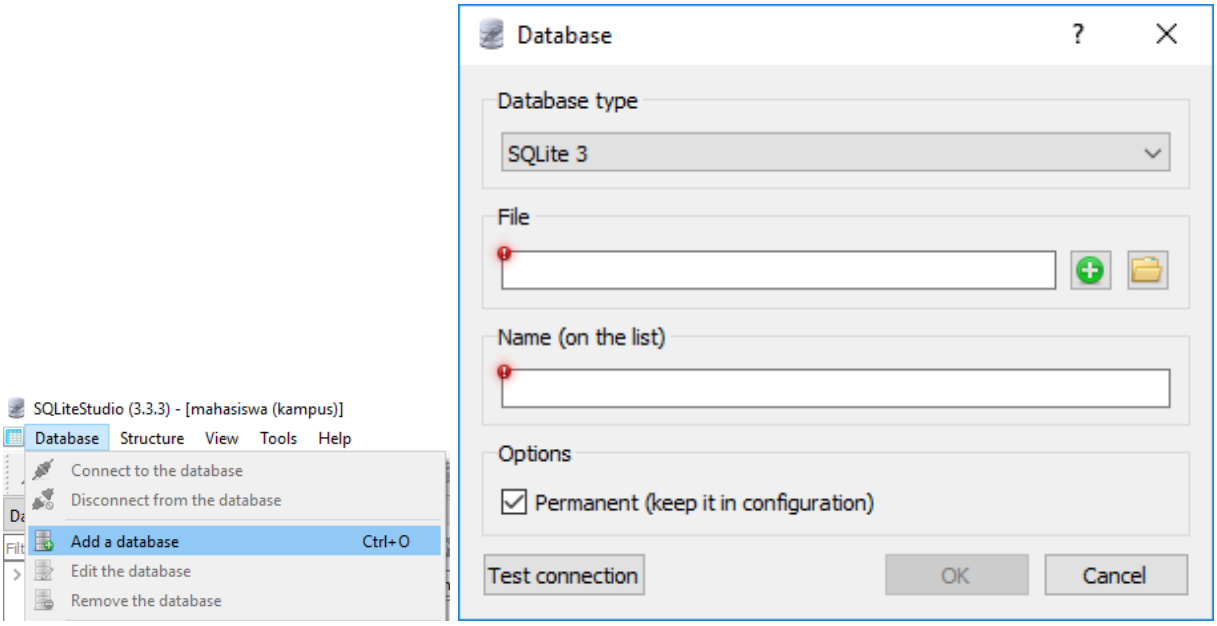
Politeknik Siber dan Sandi Negara

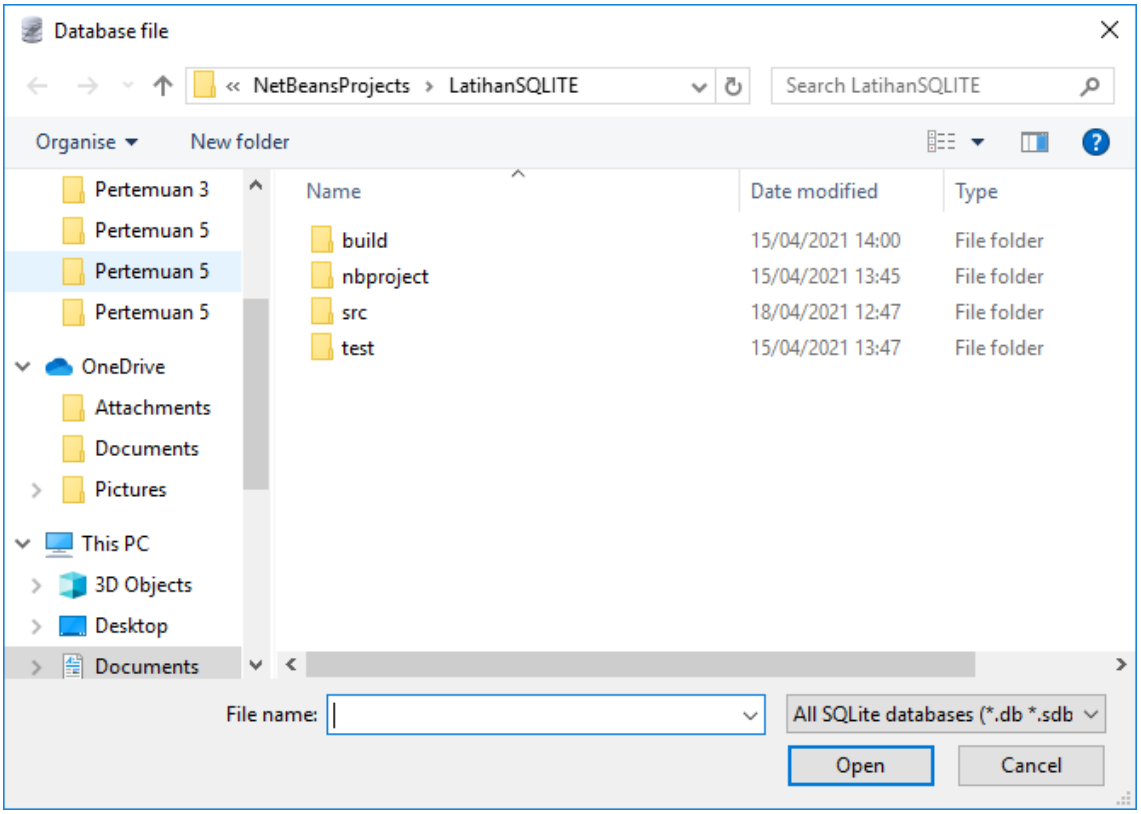
2020/2021

Jalankan sqlitestudio.exe

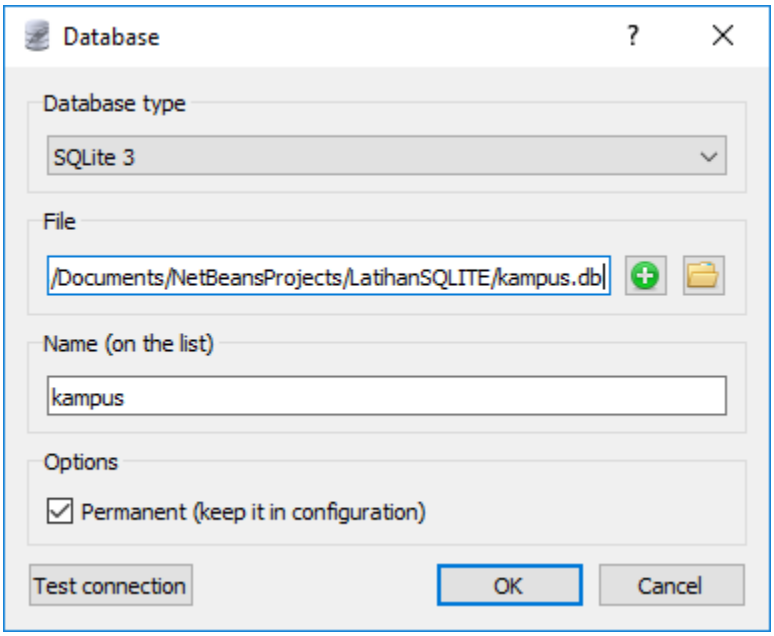


Buat projek baru dengan nama “LatihanSQLITE”. Buat basis data “kampus” dari sqlite dan letakkan di project java yang dibuat

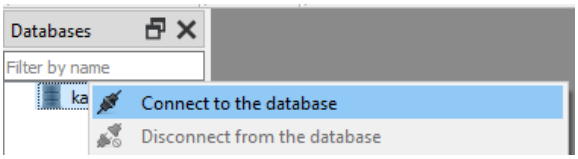




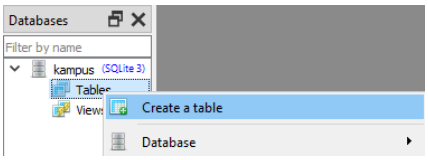
Setelah muncul seperti di bawah tekan OK



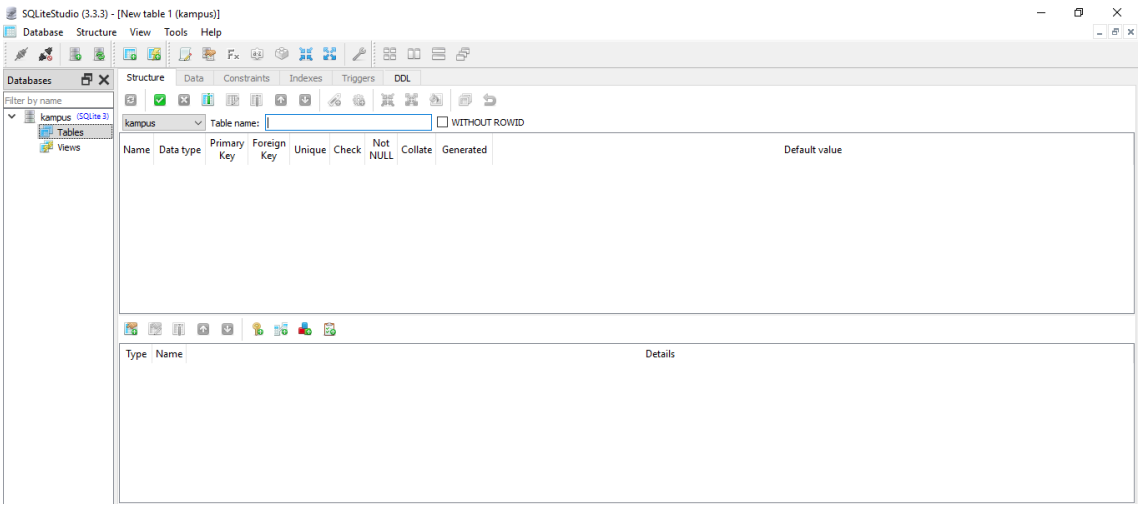
Klik kanan pada basis data tersebut dan klik *Connect to the database*

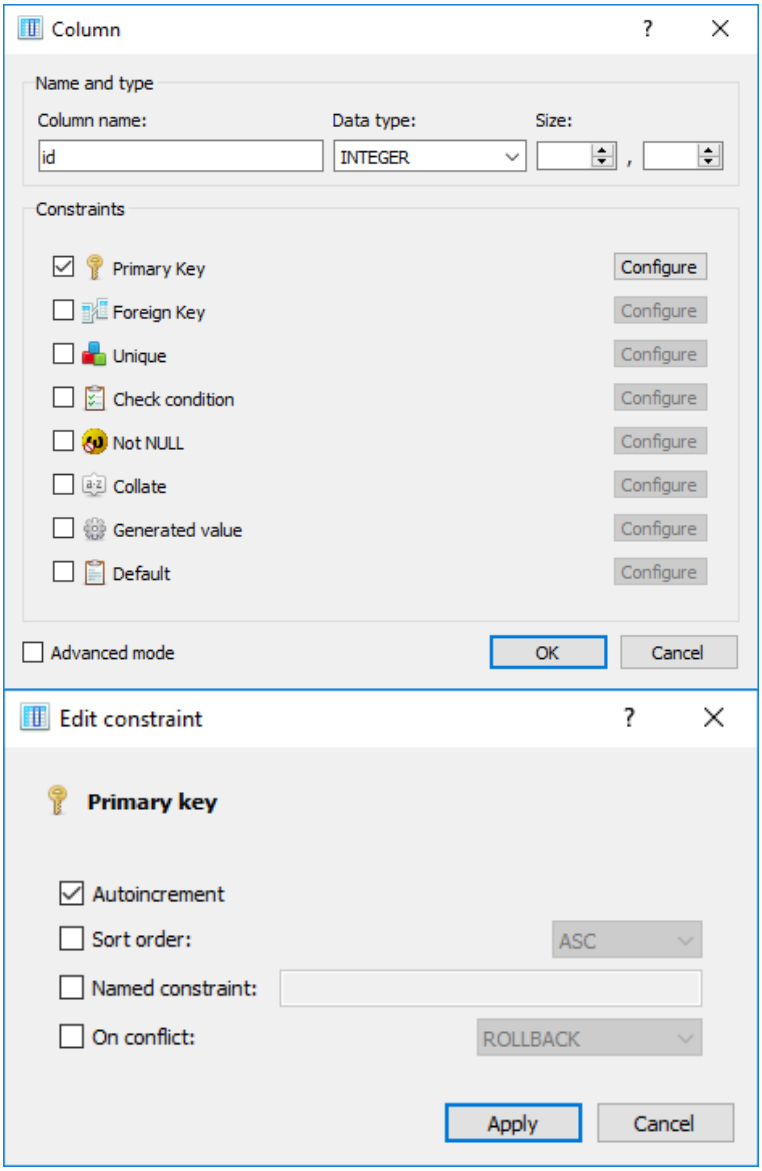


Buat tabel dengan cara klik kanan *Tables* dan klik *Create a table*

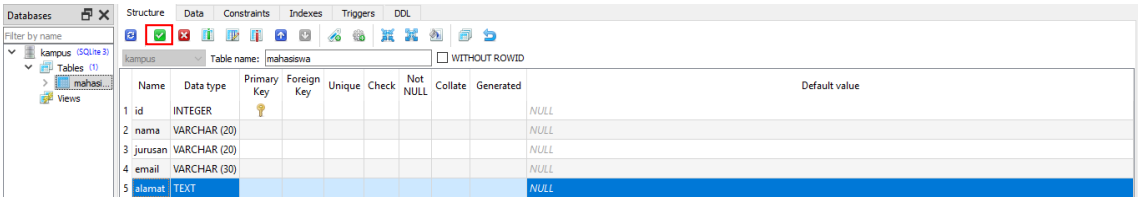


Isikan nama tabel misalkan “mahasiswa”, dilanjutkan *Add column*





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



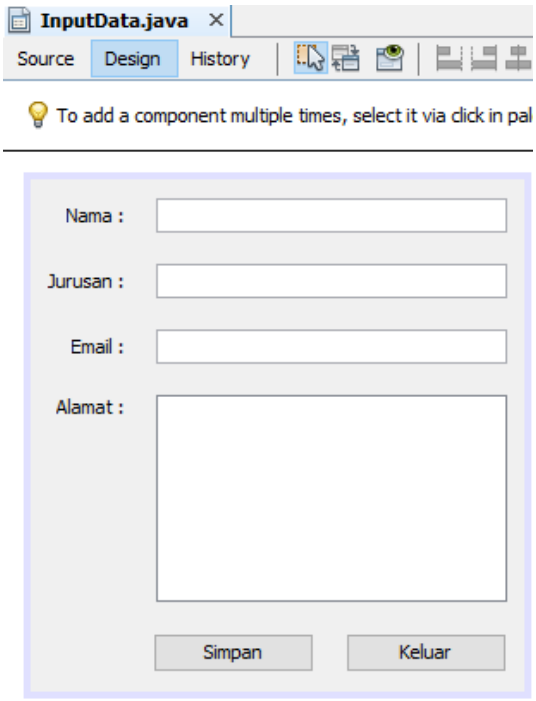
Kembali ke NetBeans dan buatlah kelas Connect. Masukkan *source code* sebagai berikut

Connect.java

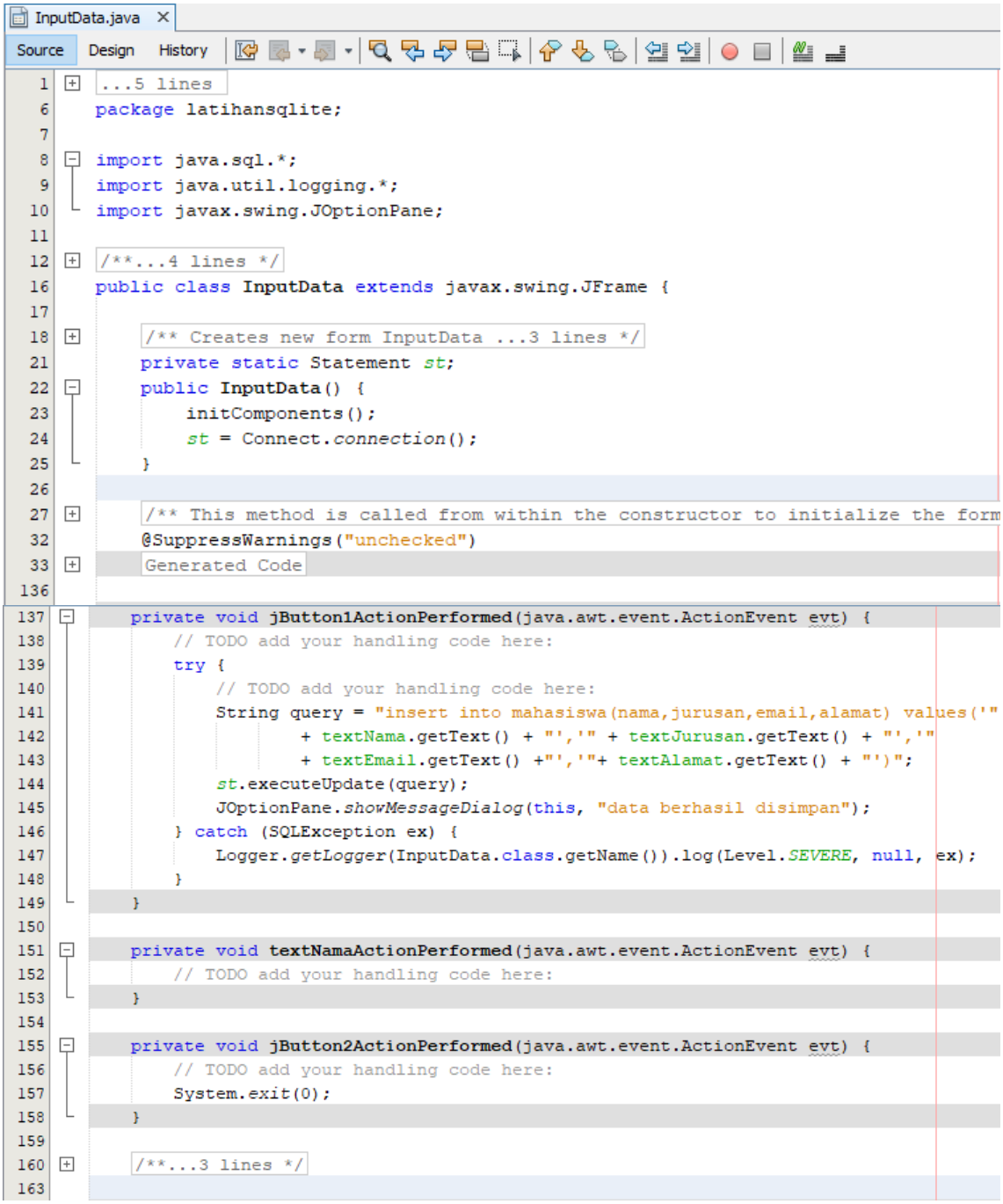
Source | History

```
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!");
           }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



Masukkan *source code* sebagai berikut pada kelas InputData



```
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     }
```

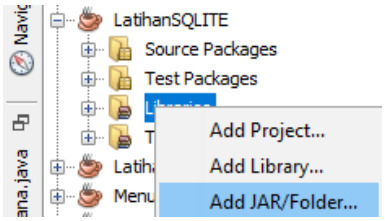
Masukkan *source code* sebagai berikut pada kelas LatihanSQLITE

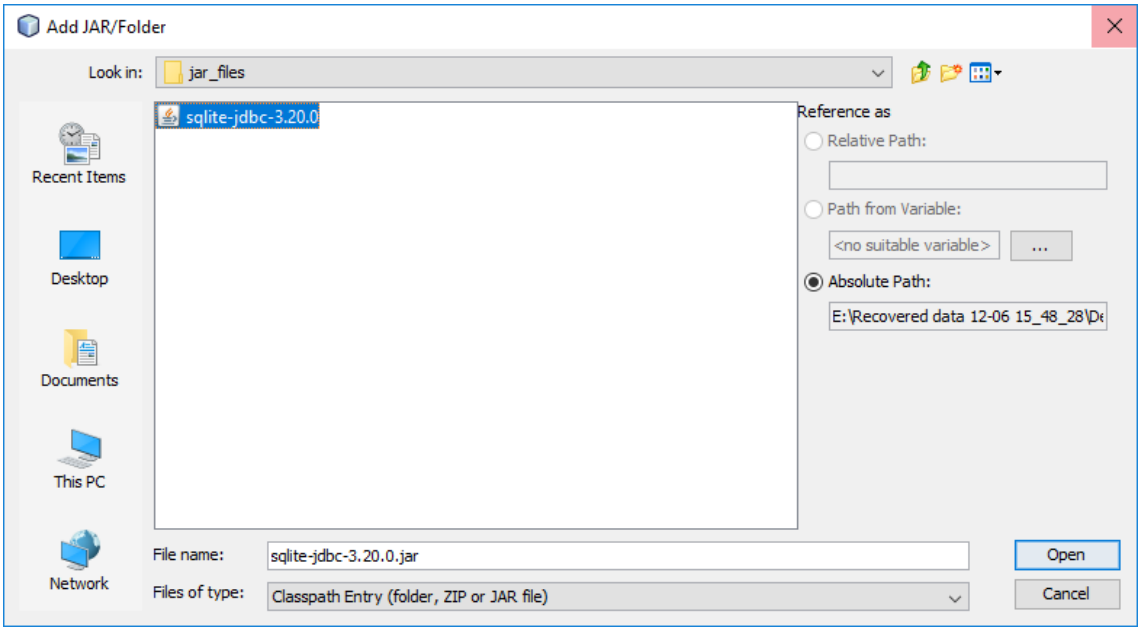
LatihanSQLITE.java

Source | History

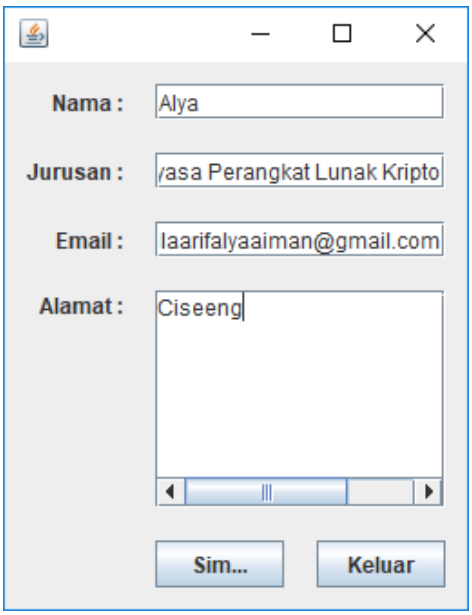
```
1   ...5 lines
6   package latihansqlite;
7
8   /**...4 lines */
12  public class LatihanSQLITE {
13
14      /**
15       * @param args the command line arguments
16       */
17      public static void main(String[] args) {
18          // TODO code application logic here
19          java.awt.EventQueue.invokeLater(new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

Tambahkan *library* .jar

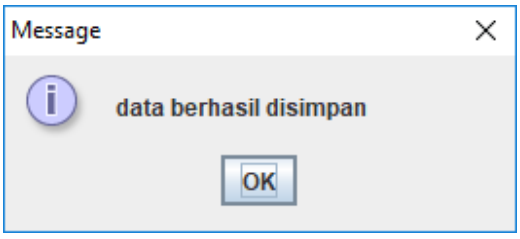




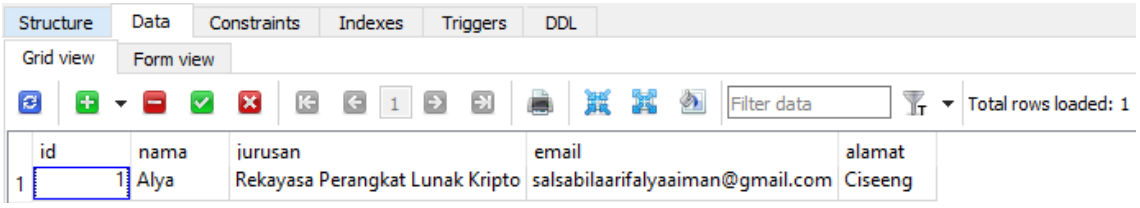
Jalankan program



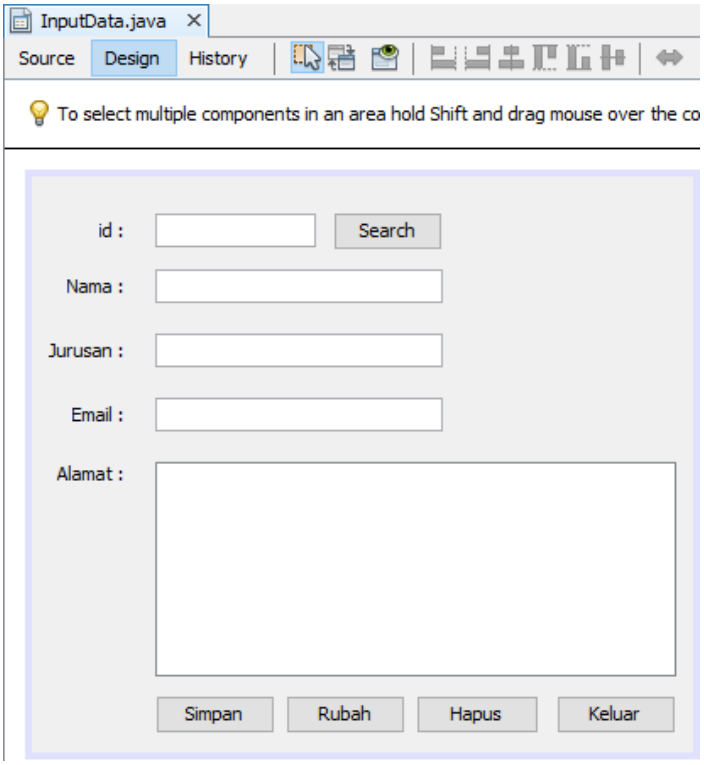
Program akan menampilkan sebagai berikut



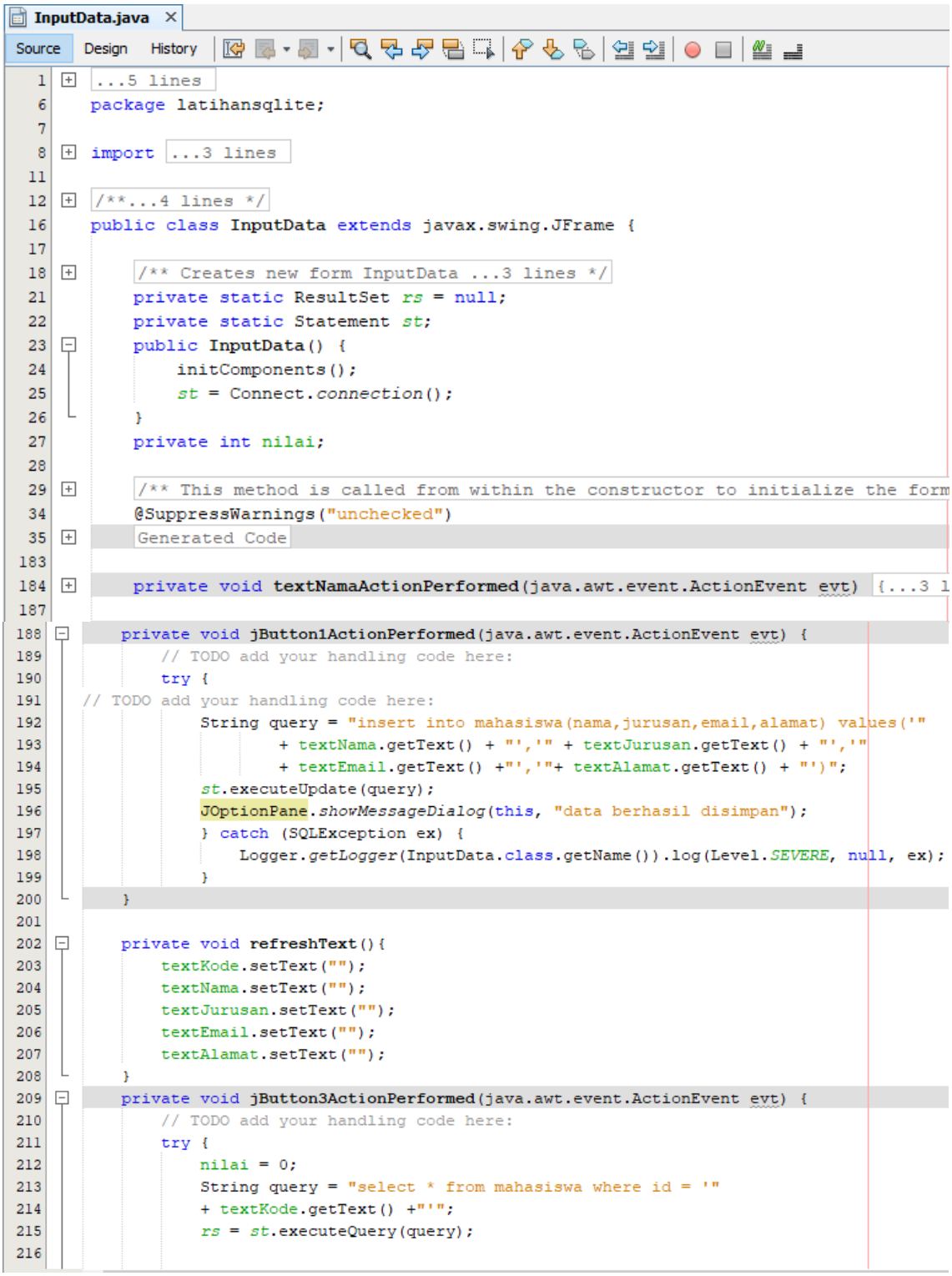
Jika tidak ada kesalahan, maka data bisa disimpan ke basis data



Ubah desain kelas InputData



Masukkan *source code* sebagai berikut pada kelas InputData

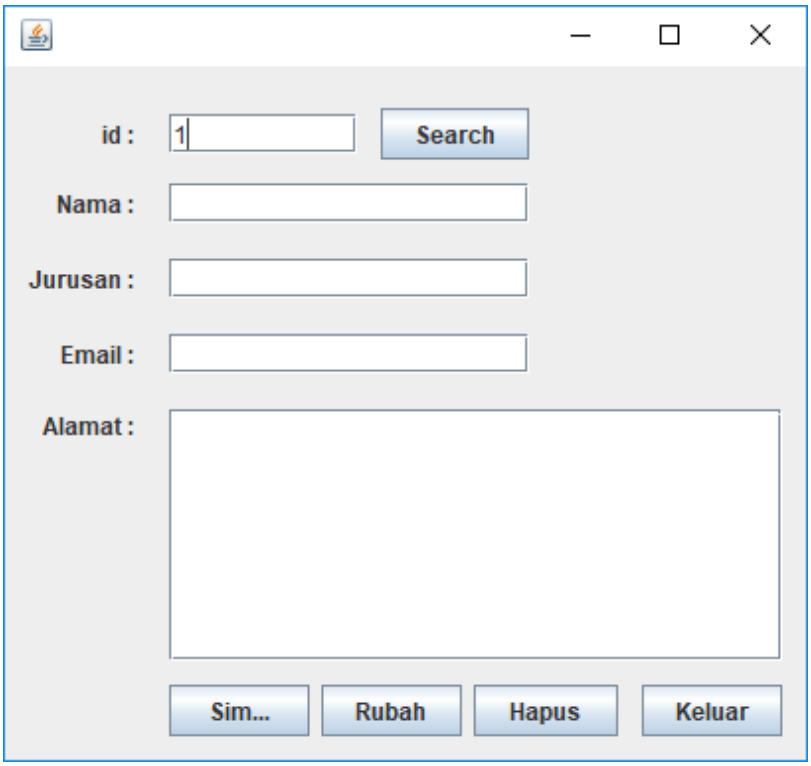


```
InputData.java
Source  Design  History
...5 lines
package latihansqlite;

import ...3 lines

/**...4 lines */
public class InputData extends javax.swing.JFrame {

    /** Creates new form InputData ...3 lines */
    private static ResultSet rs = null;
    private static Statement st;
    public InputData() {
        initComponents();
        st = Connect.connection();
    }
    private int nilai;

    /** This method is called from within the constructor to initialize the form
    @SuppressWarnings("unchecked")
    Generated Code

    private void textNamaActionPerformed(java.awt.event.ActionEvent evt) {...3 l

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        try {
// TODO add your handling code here:
            String query = "insert into mahasiswa(nama,jurusan,email,alamat) values('"
                    + textNama.getText() + "','" + textJurusan.getText() + "','"
                    + textEmail.getText() +"','"+ textAlamat.getText() + "')";
            st.executeUpdate(query);
            JOptionPane.showMessageDialog(this, "data berhasil disimpan");
            } catch (SQLException ex) {
                Logger.getLogger(InputData.class.getName()).log(Level.SEVERE, null, ex);
            }
    }

    private void refreshText(){
        textKode.setText("");
        textNama.setText("");
        textJurusan.setText("");
        textEmail.setText("");
        textAlamat.setText("");
    }
    private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        try {
            nilai = 0;
            String query = "select * from mahasiswa where id = '"
            + textKode.getText() +"'";
            rs = st.executeQuery(query);
```

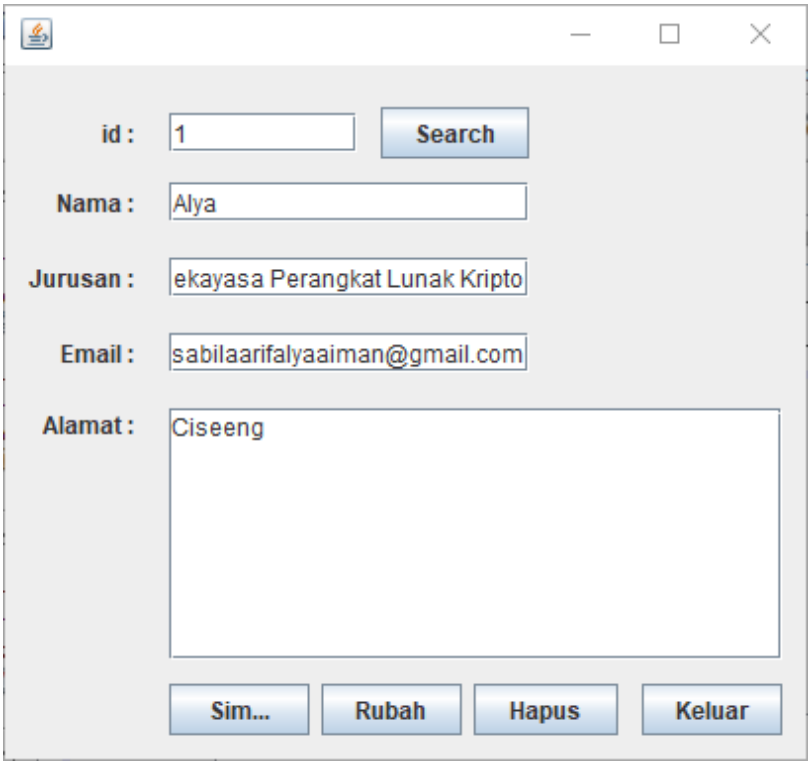
```
217                 while (rs.next()){
218                     nilai = nilai+1;
219                     String nama = rs.getString("nama");
220                     String jurusan = rs.getString("jurusan");
221                     String email = rs.getString("email");
222                     String 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             }
                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 = '"
                        + 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 */
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 }
```

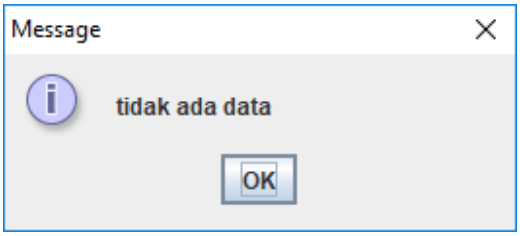
Jalankan program, makasukkan angka 1 dan tekan *button* Search



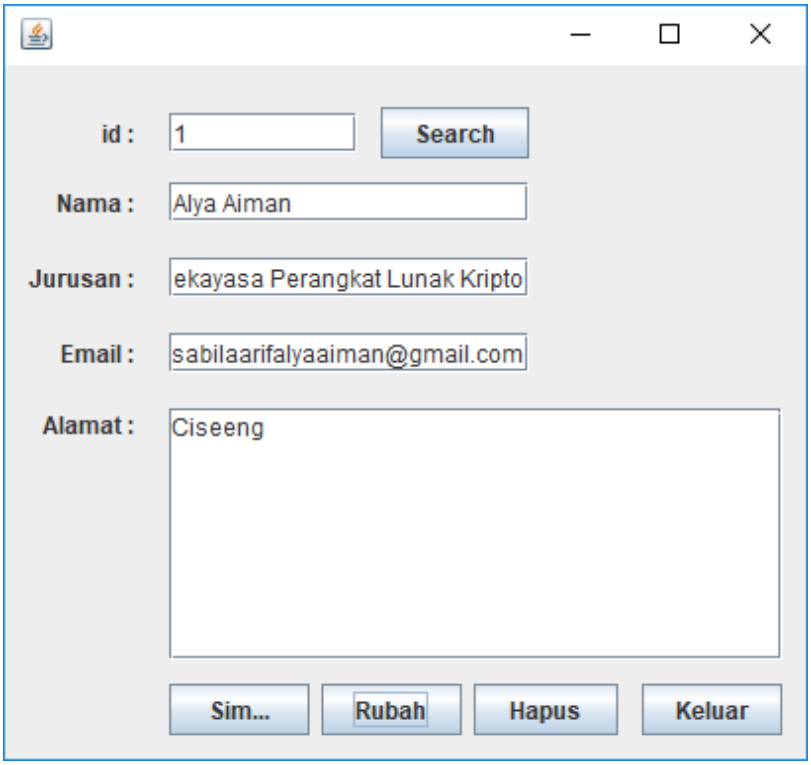
Program akan menampilkan sebagai berikut



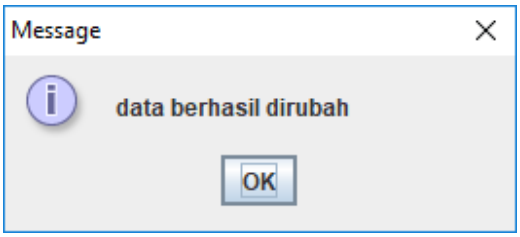
Saat data yang dimasukkan adalah data kosong, maka program akan menampilkan sebagai berikut



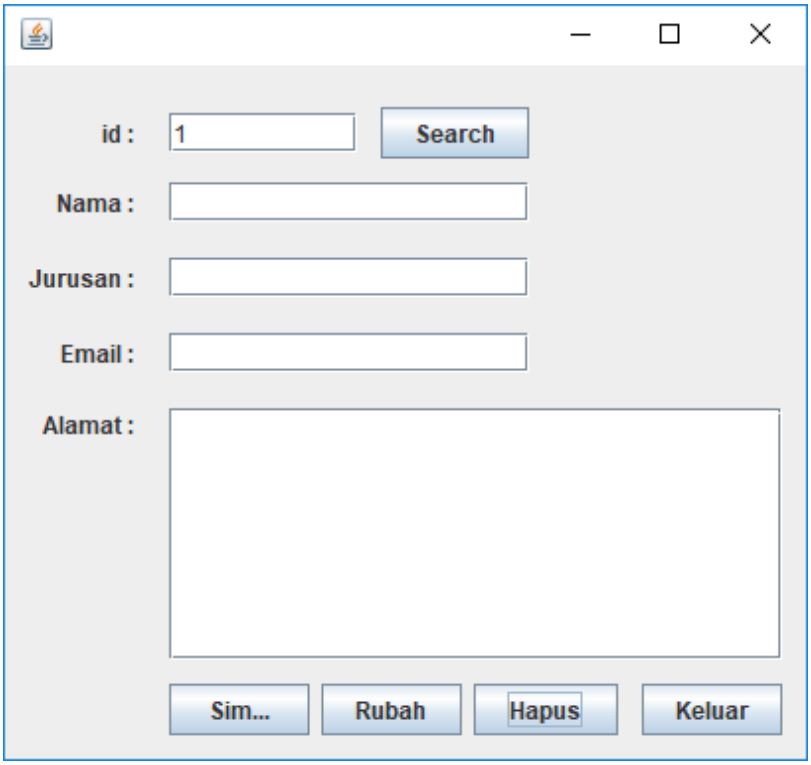
Untuk mengubah data, ubah teks yang terdapat di aplikasi dan klik *button* Rubah



Program akan menampilkan sebagai berikut



Untuk menghapus dapat klik tombol *button* Hapus



Program akan menampilkan sebagai berikut