Nama: Ismi Dzikrina

NIM : L200180010

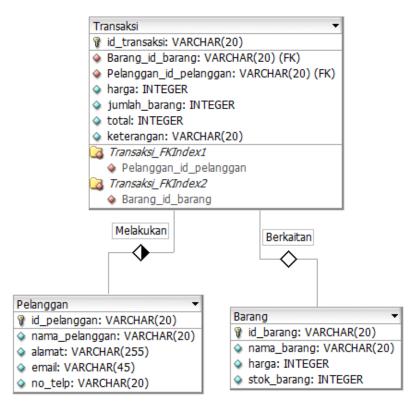
Kelas : A

Matkul: Praktikum Sistem Basis Data

MODUL 12

APLIKASI DENGAN DATABASE

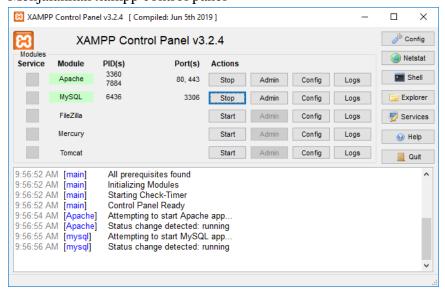
- 1. Membuat aplikasi berbasis java pada salah satu studi kasus yaitu toko online, dengan entitas yang ada antara lain :
 - o Pelanggan
 - o Barang
 - o Transaksi
- 2. Penjelasan dari studi kasus
 - a. Entitas pelanggan, memiliki attribute:
 - o Id pelanggan
 - o Nama pelanggan
 - o Alamat pelanggan
 - o Email
 - o Nomor telephone
 - b. Entitas barang, memiliki attribute:
 - o Id barang
 - o Nama barang
 - o Harga
 - o Stok
 - c. Entitas transaksi, memiliki attribute:
 - o Id transaksi
 - o Jumlah
 - o Total
 - o Keterangan
- 3. ER Diagram



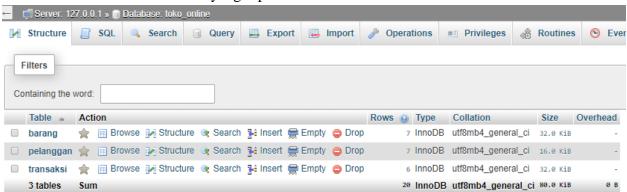
Dari ER tersebut, hubungan antara pelanggan dengan transaksi adalah 1:n yaitu satu pelanggan bisa melakukan banyak transaksi dan hubungan antara barang dan transaksi adalah 1:1 yaitu satu jenis barang hanya satu transaksi begitu juga sebaliknya.

4. Membuat aplikasi menggunakan netbeans

a. Menjalankan xampp control panel

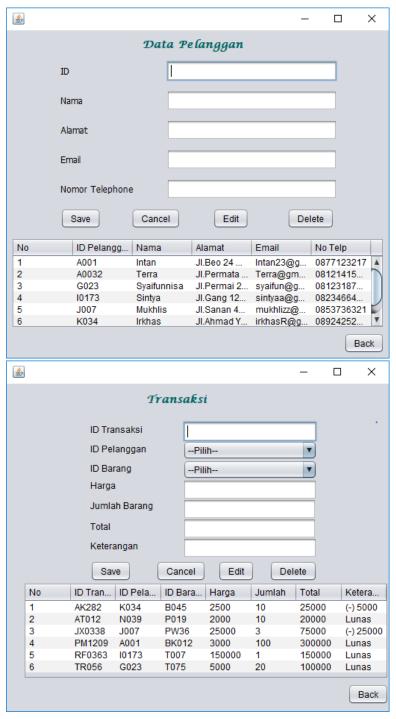


b. Membuat database beserta tabel yang dipakai



c. Membuat aplikasi dengan netbeans





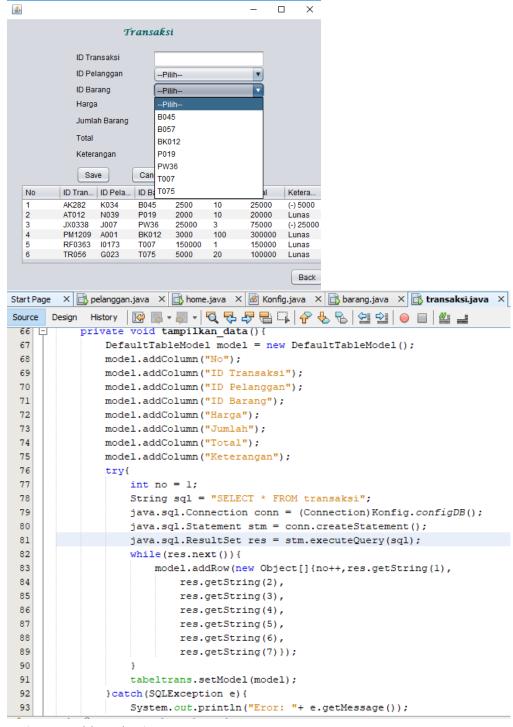
- 5. Menerapkan pada aplikasi yang dipilih, beberapa fungsi berikut untuk semua entitas:
 - Proses view (select)

```
Start Page X pelanggan.java X home.java X Konfig.java X barang.java X transaksi.java X
Source Design History | 🚱 🖫 + 💹 + 💆 😓 👺 👺 🕌 🚅 | 🚱 😓 🔁 🔁 | 🚳 🔛 | 🐠 🚅
 30
 31 🖃
           private void tampilkan data() {
 32
              DefaultTableModel model = new DefaultTableModel();
 33
               model.addColumn("No");
              model.addColumn("ID Pelanggan");
 34
 35
              model.addColumn("Nama");
              model.addColumn("Alamat");
 36
 37
              model.addColumn("Email");
 38
              model.addColumn("No Telp");
 39
 40
               try{
 41
                   int no = 1;
                   String sql = "SELECT * FROM pelanggan";
 42
 43
                   java.sql.Connection conn = (Connection)Konfig.configDB();
 44
                   java.sql.Statement stm = conn.createStatement();
 45
                   java.sql.ResultSet res = stm.executeQuery(sql);
 46
 47
                   while(res.next()){
 48
                       model.addRow(new Object[]{no++,res.getString(1),
 49
                           res.getString(2),
 50
                           res.getString(3),
 51
                           res.getString(4),
 52
                           res.getString(5)});
 53
 54
                   tabel.setModel(model);
 55
               }catch(SQLException e) {
 56
                   System.out.println("Eror: "+ e.getMessage());
 57
```

```
Start Page X pelanggan.java X home.java X Konfig.java X barang.java X transaksi.java X
     Design History 🔯 🖫 + 🖫 + 🕄 + 🔩 😓 😓 🔛 🕌 🕌 🖺 🖆 🗐 📵 📗 🎥 🚅
Source
               txt_stok.setText(null);
 28
 29
 30 🖃
           private void tampilkan_data(){
              DefaultTableModel model = new DefaultTableModel();
 31
              model.addColumn("No");
 32
 33
              model.addColumn("ID Barang");
              model.addColumn("Nama Barang");
 34
 35
              model.addColumn("Harga");
 36
              model.addColumn("Stok");
 37
 38
               try{
 39
                   int no = 1;
 40
                  String sql = "SELECT * FROM barang";
 41
                  java.sql.Connection conn = (Connection)Konfig.configDB();
 42
                  java.sql.Statement stm = conn.createStatement();
 43
                   java.sql.ResultSet res = stm.executeQuery(sql);
 44
 45
                   while(res.next()){
 46
                       model.addRow(new Object[]{no++,res.getString(1),
 47
                           res.getString(2),
 48
                           res.getString(3),
                           res.getString(4)});
 49
 50
 51
                   tabelbar.setModel(model);
 52
               }catch(SQLException e) {
 53
                   System.out.println("Eror: "+ e.getMessage());
 54
 55
```

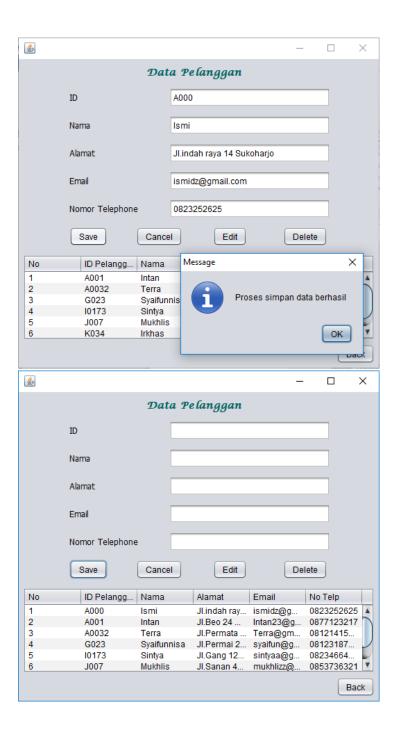
o Transaksi

```
Start Page X pelanggan, java X home. java X Konfig. java X barang. java X transaksi. java X
Source Design History 🕼 🖫 🔻 🗸 🗸 🔁 🖺 🖫 🚱 🔁 🖭 🎱 📦 📲 🚅
 27
           //private Konfig db = new Konfig();
 28 🖃
           public void idPelToComboBox() {
 29
               trv{
                   String sql = "SELECT*FROM pelanggan";
 30
                   java.sql.Connection conn = (Connection)Konfig.configDB();
 31
                   java.sql.Statement stm = conn.createStatement();
 32
                   java.sql.ResultSet res = stm.executeQuery(sql);
 33
 34
                   while(res.next()){
 35
                       combo_pel.addItem(res.getString("id_pelanggan"));
 36
 37
                   res.last();
 38
                   int jumlah data =res.getRow();
 39
               }catch(SQLException e) {
 40
 41
 42
    public void idBarToComboBox() {
 43
               try{
 44
                   String sql = "SELECT*FROM barang";
 45
                   java.sql.Connection conn = (Connection) Konfig.configDB();
 46
                   java.sql.Statement stm = conn.createStatement();
 47
                   java.sql.ResultSet res = stm.executeQuery(sql);
 48
                   while (res.next()) {
 49
                       combo_bar.addItem(res.getString("id_barang"));
 50
                   }
 51
                   res.last();
 52
                   int jumlah data =res.getRow();
 53
               }catch(SQLException e) {
```



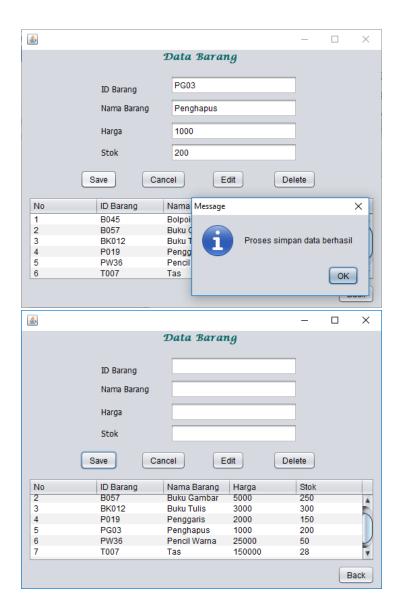
Insert (memasukkan data)

```
private void bt saveActionPerformed(java.awt.event.ActionEvent evt) {
     // TODO add your handling code here:
     try{
          String sql = "INSERT INTO pelanggan VALUES ('"
                   +txt id.getText()+"','"
                   +txt nama.getText()+"','"
                   +txt alamat.getText()+"','"
                   +txt_email.getText()+"','"
                   +txt_no.getText()+"')";
          java.sql.Connection Conn = (Connection)Konfig.configDB();
          java.sql.PreparedStatement pstm = Conn.prepareStatement(sql);
         pstm.execute();
         JOptionPane.showMessageDialog(null, "Proses simpan data berhasil");
         tampilkan data();
         kosongkan form();
    }catch(HeadlessException | SQLException e) {
          JOptionPane.showMessageDialog(this, e.getMessage());
}
<u>$</u>
                                                        Data Pelanggan
         ID
                            A000
         Nama
                            Ismi
                            Jl.indah raya 14 Sukoharjo
         Alamat
         Email
                            ismidz@gmail.com
         Nomor Telephone
                            0823252625
                                    Edit
                      Cancel
                                                  Delete
          Save
           ID Pelangg... Nama
                             Alamat
                                       Email
                                                   No Telp
 No
                                JI.Beo 24 ...
                                          Intan23@g... 0877123217 A
 2
           A0032
                      Terra
                                JI.Permata ... Terra@gm... 08121415...
            G023
                      Syaifunnisa
                                JI.Permai 2... syaifun@g...
                                                     08123187
 3
 4
           10173
                      Sintva
                                JI.Gang 12... sintyaa@g... 08234664...
                                Jl.Sanan 4... mukhlizz@... 085373632
Jl.Ahmad Y... irkhasR@g... 08924252...
 5
            J007
                      Mukhlis
                                                    0853736321
08924252
           K034
                      Irkhas
                                                           Back
```



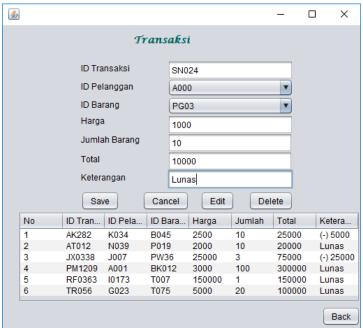
```
private void bt saveActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    try{
        String sql = "INSERT INTO barang VALUES ('"
                +txt_idbar.getText()+"','"
                +txt_namabar.getText()+"','"
                +txt_harga.getText()+"','"
                +txt stok.getText()+"')";
        java.sql.Connection Conn = (Connection) Konfig.configDB();
        java.sql.PreparedStatement pstm = Conn.prepareStatement(sql);
        pstm.execute();
        JOptionPane.showMessageDialog(null, "Proses simpan data berhasil");
        tampilkan data();
        kosongkan form();
   }catch(HeadlessException | SQLException e) {
        JOptionPane.showMessageDialog(this, e.getMessage());
}
<u>$</u>
                                               Data Barang
```

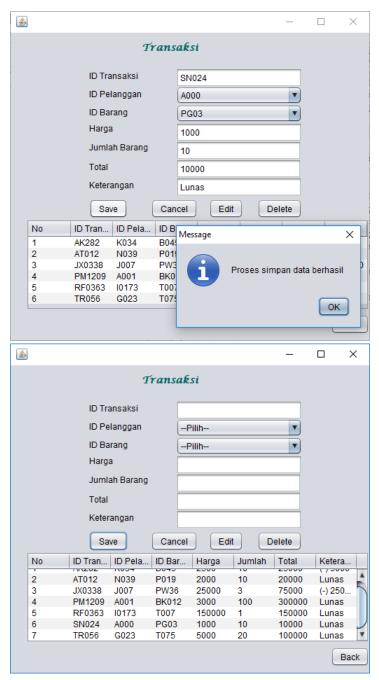




o Transaksi

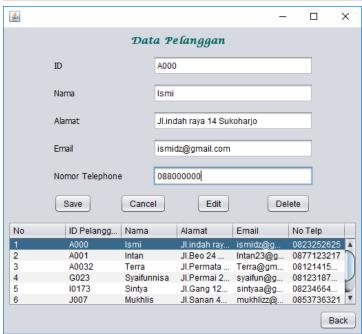
```
private void bt saveActionPerformed(java.awt.event.ActionEvent evt) {
     // TODO add your handling code here:
     try{
         String sql = "INSERT INTO transaksi VALUES ('"
                 +txt idtrans.getText()+"','"
                 +combo pel.getSelectedItem()+"','"
                 +combo_bar.getSelectedItem()+"','"
                 +txt_harga.getText()+"','"
                 +txt jumlah.getText()+"','"
                 +txt_total.getText()+"','"
                 +txt ket.getText()+"')";
         java.sql.Connection Conn = (Connection) Konfig.configDB();
         java.sql.PreparedStatement pstm = Conn.prepareStatement(sql);
         pstm.execute();
         JOptionPane.showMessageDialog(null, "Proses simpan data berhasil");
         tampilkan data();
         kosongkan_form();
    }catch(HeadlessException | SQLException e) {
         JOptionPane.showMessageDialog(this, e.getMessage());
}
```

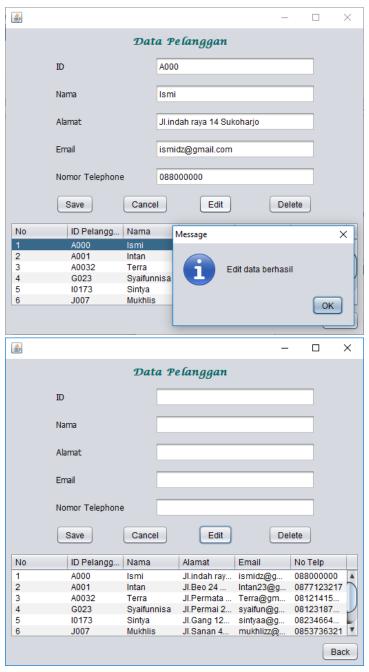




Update (mengubah data)

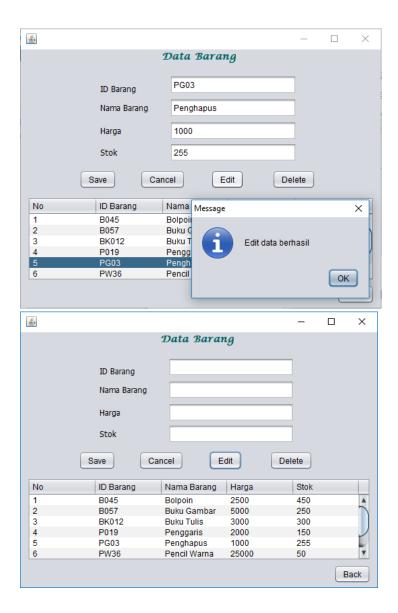
```
private void bt editActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
   try{
        String sql = "UPDATE pelanggan set id_pelanggan ='"+txt_id.getText()
                +"',nama_pelanggan='"+txt_nama.getText()
                +"',alamat='"+txt_alamat.getText()
                +"',email='"+txt_email.getText()
                +"',no_telp='"+txt_no.getText()
                +"' WHERE id_pelanggan='"+txt_id.getText()+"'";
        java.sql.Connection Conn = (Connection) Konfig.configDB();
        java.sql.PreparedStatement pstm = Conn.prepareStatement(sql);
        pstm.execute();
        JOptionPane.showMessageDialog(null, "Edit data berhasil");
    }catch(HeadlessException | SQLException e) {
        JOptionPane.showMessageDialog(this, e.getMessage());
    tampilkan data();
    kosongkan form();
```





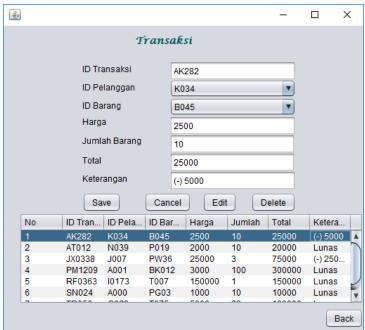
```
private void bt_editActionPerformed(java.awt.event.ActionEvent evt) {
     // TODO add your handling code here:
           try{
         String sql = "UPDATE barang set id_barang ='"+txt_idbar.getText()
                 +"',nama_barang='"+txt_namabar.getText()
                 +"', harga='"+txt harga.getText()
                 +"',stok='"+txt_stok.getText()
                 +"' WHERE id_barang='"+txt_idbar.getText()+"'";
         java.sql.Connection Conn = (Connection)Konfig.configDB();
         java.sql.PreparedStatement pstm = Conn.prepareStatement(sql);
         pstm.execute();
         JOptionPane.showMessageDialog(null, "Edit data berhasil");
     }catch(HeadlessException | SQLException e) {
         JOptionPane.showMessageDialog(this, e.getMessage());
     tampilkan data();
     kosongkan form();
}
```

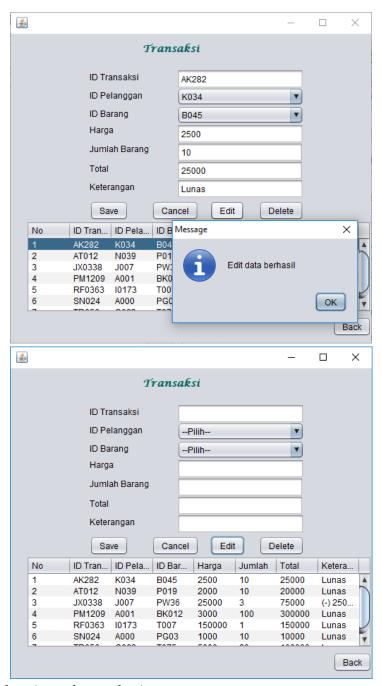




Transaksi

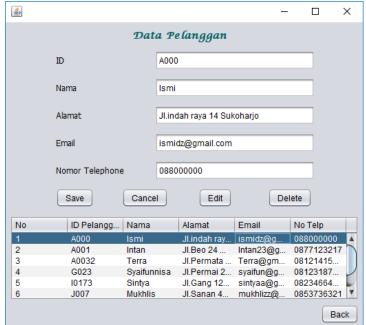
```
private void bt_editActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
     try{
        String sql = "UPDATE transaksi set id_transaksi ='"+txt_idtrans.getText()
                +"',id_pelanggan='"+combo_pel.getSelectedItem()
                +"',id_barang='"+combo_bar.getSelectedItem()
                +"', harga='"+txt_harga.getText()
                +"',jumlah='"+txt jumlah.getText()
                +"',total='"+txt_total.getText()
                +"', keterangan='"+txt_ket.getText()
                +"' WHERE id_transaksi='"+txt_idtrans.getText()+"'";
        java.sql.Connection Conn = (Connection)Konfig.configDB();
        java.sql.PreparedStatement pstm = Conn.prepareStatement(sql);
        pstm.execute();
        JOptionPane.showMessageDialog(null, "Edit data berhasil");
    }catch(HeadlessException | SQLException e) {
        JOptionPane.showMessageDialog(this, e.getMessage());
    tampilkan_data();
    kosongkan_form();
}
```

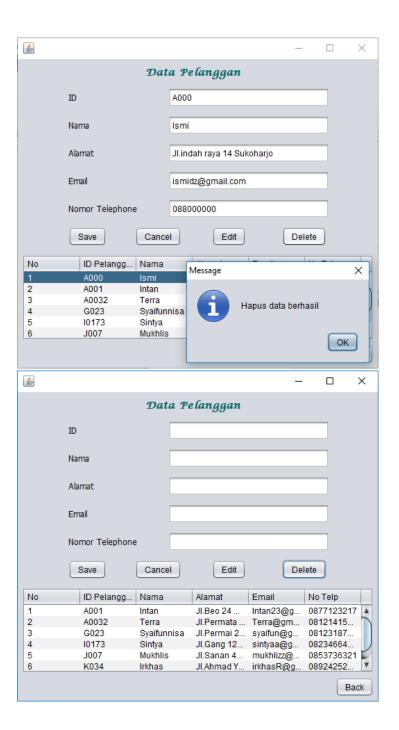




Delete (menghapus data)

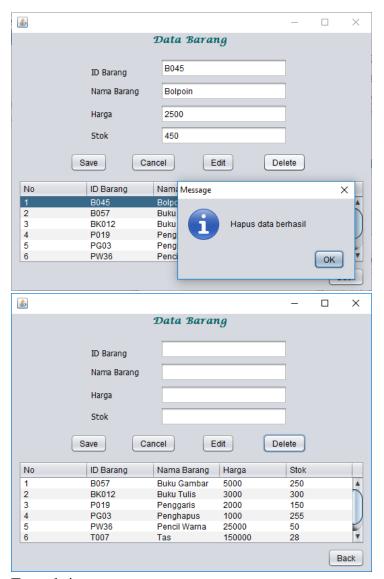
```
private void bt_deleteActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    try{
        String sql = "DELETE FROM pelanggan WHERE id_pelanggan='"+txt_id.getText()+"'";
        java.sql.Connection conn =(Connection) Konfig.configDB();
        java.sql.PreparedStatement pstm = conn.prepareStatement(sql);
        pstm.execute();
        JOptionPane.showMessageDialog(null, "Hapus data berhasil");
    }catch(HeadlessException | SQLException e) {
        JOptionPane.showMessageDialog(this, e.getMessage());
    }
    tampilkan_data();
    kosongkan_form();
}
```





```
private void bt_deleteActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    try{
        String sql = "DELETE FROM barang WHERE id_barang='"+txt_idbar.getText()+"'";
        java.sql.Connection conn = (Connection) Konfig.configDB();
        java.sql.PreparedStatement pstm = conn.prepareStatement(sql);
        pstm.execute();
        JOptionPane.showMessageDialog(null, "Hapus data berhasil");
    }catch(HeadlessException | SQLException e) {
        JOptionPane.showMessageDialog(this, e.getMessage());
    }
    tampilkan_data();
    kosongkan_form();
}
```





Transaksi

```
private void bt_deleteActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    try{
        String sql = "DELETE FROM transaksi WHERE id_transaksi='"+txt_idtrans.getText()+"'";
        java.sql.Connection conn =(Connection) Konfig.configDB();
        java.sql.PreparedStatement pstm = conn.prepareStatement(sql);
        pstm.execute();
        JOptionPane.showMessageDialog(null, "Hapus data berhasil");
    }catch(HeadlessException | SQLException e) {
        JOptionPane.showMessageDialog(this, e.getMessage());
    }
    tampilkan_data();
    kosongkan_form();
}
```

