# Laporan Hasil Praktikum

# Pemrograman Desktop

## Tugas 8

ALYA AIMAN SALSABILA ARIF

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Tingkat III Rekayasa Perangkat Lunak Kripto

Politeknik Siber dan Sandi Negara

2020/2021

Masukkan *source code* sebagai berikut pada kelas LatihanJavaDatabase.java

LatihanJavaDatabase.java

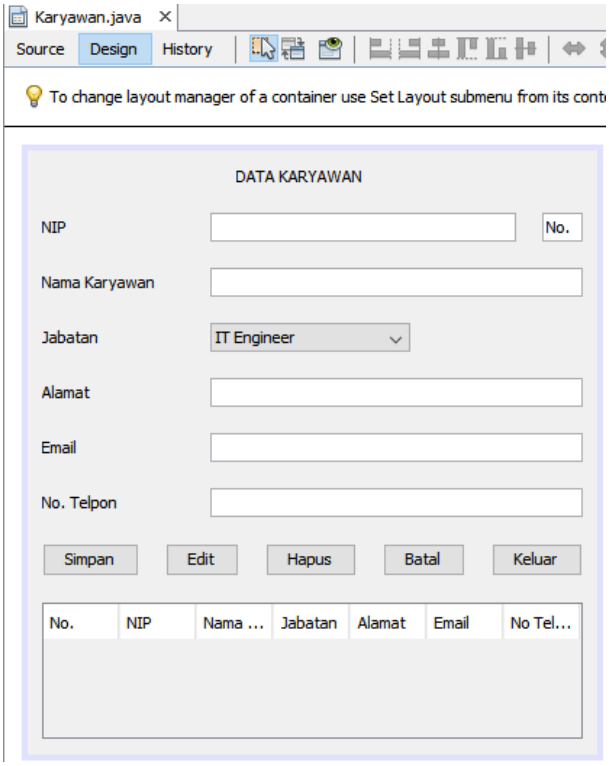
```
1  ...5 lines
6  package latihanjavadatabase;
7
8  /**...4 lines */
12 public class LatihanJavaDatabase {
13
14     /**...3 lines */
17     public static void main(String[] args) {
18         // TODO code application logic here
           java.awt.EventQueue.invokeLater(new Runnable() {
               public void run() {
21                 new Karyawan().setVisible(true);
22             }
23         });
24     }
25 }
```

Masukkan *source code* sebagai berikut pada kelas Config.java

Config.java

```
1  ...5 lines
6  package latihanjavadatabase;
7
8  import ...3 lines
11
12 /**...4 lines */
16 public class Config {
17     private static Connection con;
18     public static Connection getKoneksi (){
19         try {
20             String url = "jdbc:mysql://localhost/latihanjavadatabase";
21             String user = "root";
22             String password = "";
23             DriverManager.registerDriver(new com.mysql.jdbc.Driver());
24             con = DriverManager.getConnection(url, user, password);
25             System.out.println("koneksi sukses");
26         } catch (SQLException t) {
27             System.out.println("Error Membuat Koneksi");
28         }
29     return con;
30     }
31 }
```

Buatlah desain kelas Karyawan



Masukkan *source code* sebagai berikut pada kelas Karyawan.java

Karyawan.java

Source | Design | History

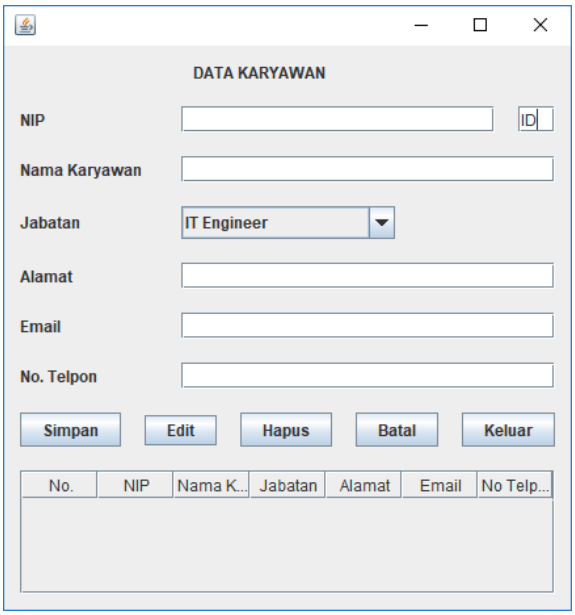
```
...5 lines
package latihanjavadatabase;

import ...13 lines

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

    /** Creates new form Karyawan ...3 lines */
    public Karyawan() {
        initComponents();
        loadData();
    }

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

    private void textNamaActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
    }

    private void jSimpanActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        String nip = textNip.getText();
        String nama = textNama.getText();
        String jabatan = (String)cJabatan.getSelectedItem();
        String alamat = textAlamat.getText();
        String email = textEmail.getText();
        String notelp = textNotelp.getText();

    try{
        Connection c = Config.getKoneksi();
        String sql = "INSERT INTO KARYAWAN(nip,nama,jabatan,alamat,email,no_telp) VALUES (?, ?, ?, ?, ?,?)";
        PreparedStatement p = c.prepareStatement(sql);
        p.setString(1, nip);
        p.setString(2, nama);
        p.setString(3, jabatan);
        p.setString(4, alamat);
        p.setString(5, email);
        p.setString(6, notelp);
        p.executeUpdate();
        p.close();
    } catch(SQLException e) {
        System.out.println("Terjadi Kesalahan");
    }
    refreshTabel();
    loadData();
    }

    private void cJabatanActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:

    }
```

```
316     private void jHapusActionPerformed(java.awt.event.ActionEvent evt) {
317         // TODO add your handling code here:
318         String no = textNo.getText();
319         try{
320             Connection c = Config.getKoneksi();
321             String sql = "delete FROM KARYAWAN where no =?";
            PreparedStatement p = c.prepareStatement(sql);
323             p.setString(1,no);
324             p.executeUpdate();
325             p.close();
326             JOptionPane.showMessageDialog(this,"data berhasil dihapus");
327             refreshText();
328             refreshTabel();
329             loadData();
330         }
331         catch (SQLException ex){
332             System.out.println("Terjadi Kesalahan");
333         }
334         refreshTabel();
335         loadData();
336         refreshText();
337     }
338 
339     private void jKeluarActionPerformed(java.awt.event.ActionEvent evt) {
340         // TODO add your handling code here:
341         System.exit(0);
342     }
343 
344     private void jEditActionPerformed(java.awt.event.ActionEvent evt) {
345         // TODO add your handling code here:
346         String no = textNo.getText();
347         String nip = textNip.getText();
348         String nama = textNama.getText();
349         String jabatan = (String)cJabatan.getSelectedItem();
350         String alamat = textAlamat.getText();
351         String email = textEmail.getText();
352         String notelp = textNotelp.getText();
353 
354         try{
355             Connection c = Config.getKoneksi();
356             String sql = "UPDATE KARYAWAN SET nip=?,nama=?,jabatan=?,alamat=?,email=?,no_telp=? where no=?";
            PreparedStatement p = c.prepareStatement(sql);
358             p.setString(1, nip);
359             p.setString(2, nama);
360             p.setString(3, jabatan);
361             p.setString(4, alamat);
362             p.setString(5, email);
363             p.setString(6, notelp);
364             p.setString(7, no);
365             p.executeUpdate();
366             p.close();
367             JOptionPane.showMessageDialog(this, "data berhasil dirubah");
368         } catch(SQLException e) {
369             System.out.println("Terjadi Kesalahan");
370         }
371         refreshTabel();
372         loadData();
373         refreshText();
```

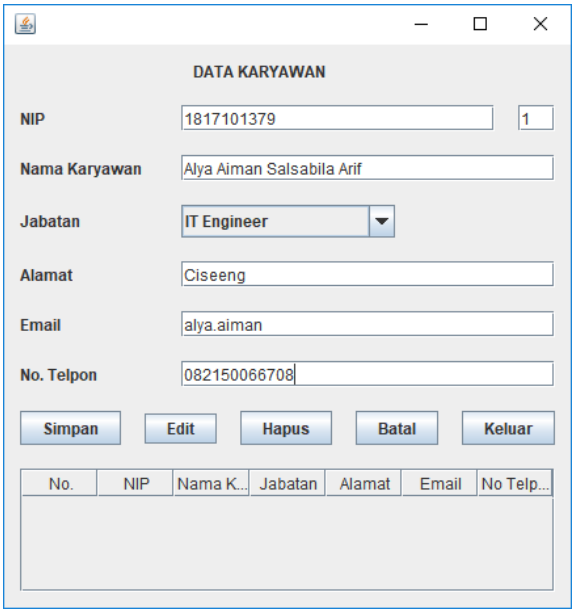
```
374     }
375
376     private void tabelKaryawanMouseClicked(java.awt.event.MouseEvent evt) {
377         // TODO add your handling code here:
378         int index = tabelKaryawan.getSelectedRow();
379         TableModel model = tabelKaryawan.getModel();
380         textNo.setText(model.getValueAt(index, 0).toString());
381         textNip.setText(model.getValueAt(index, 1).toString());
382         textNama.setText(model.getValueAt(index, 2).toString());
383         Object obj = tabelKaryawan.getValueAt(index,3);
384         cJabatan.setSelectedItem(obj);
385
386         textAlamat.setText(model.getValueAt(index, 4).toString());
387         textEmail.setText(model.getValueAt(index, 5).toString());
388         textNotelp.setText(model.getValueAt(index, 6).toString());
389     }
390
391     private void jBatalActionPerformed(java.awt.event.ActionEvent evt) {
392         // TODO add your handling code here:
393         refreshTabel();
394         loadData();
395         refreshText();
396     }
397
398     private void loadData(){
399         try{
400             Connection c = Config.getKoneksi();
            Statement s = c.createStatement();
402
403             String sql = "SELECT * FROM KARYAWAN";
404             ResultSet r = s.executeQuery(sql);
405         while (r.next()) {
406             // lakukan penelusuran baris
407             String no = r.getString("no");
408             String nip = r.getString("nip");
409             String nama = r.getString("nama");
410             String jabatan = r.getString("jabatan");
411             String alamat = r.getString("alamat");
412             String email = r.getString("email");
413             String notelp = r.getString("no_telp");
414
415             String tbData[] = {no,nip,nama,jabatan,alamat,email,notelp};
416
417             DefaultTableModel tblModel = (DefaultTableModel)tabelKaryawan.getModel();
418             tblModel.addRow(tbData);
419             }
420         r.close();
421         s.close();
422         } catch(SQLException e) {
423             System.out.println("Terjadi Kesalahan");
424         }
425     }
426
```

```
427     private void refreshTabel(){
428         DefaultTableModel model =(DefaultTableModel)
429         tabelKaryawan.getModel();
430         while(model.getRowCount()>0){
431             model.setRowCount(0);
432         }
433     }
434 
435     private void refreshText(){
436         textNip.setText("");
437         textNama.setText("");
438         textAlamat.setText("");
439         textEmail.setText("");
440         textNotelp.setText("");
441         textNip.requestFocus();
442     }
443 
444     // Variables declaration - do not modify
445     private javax.swing.JComboBox<String> cJabatan;
446     private javax.swing.JButton jBatal;
447     private javax.swing.JButton jEdit;
448     private javax.swing.JButton jHapus;
449     private javax.swing.JButton jKeluar;
450     private javax.swing.JLabel jLabel1;
451     private javax.swing.JLabel jLabel2;
452     private javax.swing.JLabel jLabel3;
453     private javax.swing.JLabel jLabel4;
454     private javax.swing.JLabel jLabel5;
455     private javax.swing.JLabel jLabel6;
456     private javax.swing.JLabel jLabel7;
457     private javax.swing.JScrollPane jScrollPane1;
458     private javax.swing.JScrollPane jScrollPane2;
459     private javax.swing.JScrollPane jScrollPane3;
460     private javax.swing.JButton jSimpan;
461     private javax.swing.JTable jTable1;
462     private javax.swing.JTable jTable2;
463     private javax.swing.JTable tabelKaryawan;
464     private javax.swing.JTextField textAlamat;
465     private javax.swing.JTextField textEmail;
466     private javax.swing.JTextField textNama;
467     private javax.swing.JTextField textNip;
468     private javax.swing.JTextField textNo;
469     private javax.swing.JTextField textNotelp;
470     // End of variables declaration
471 }
```

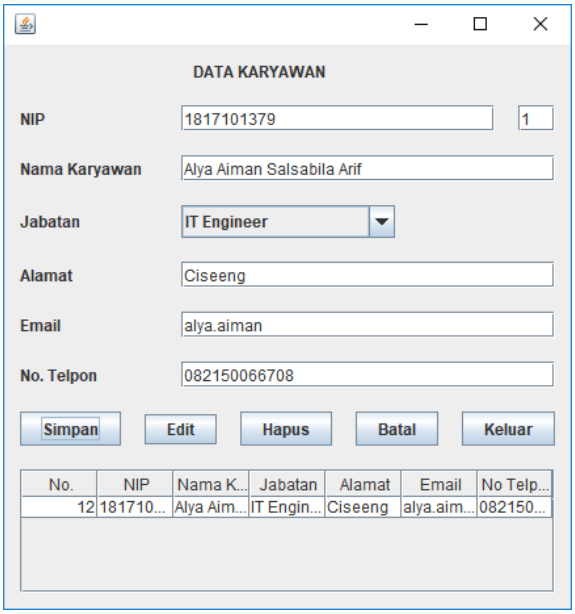
Jalankan program. Program akan menampilkan sebagai berikut



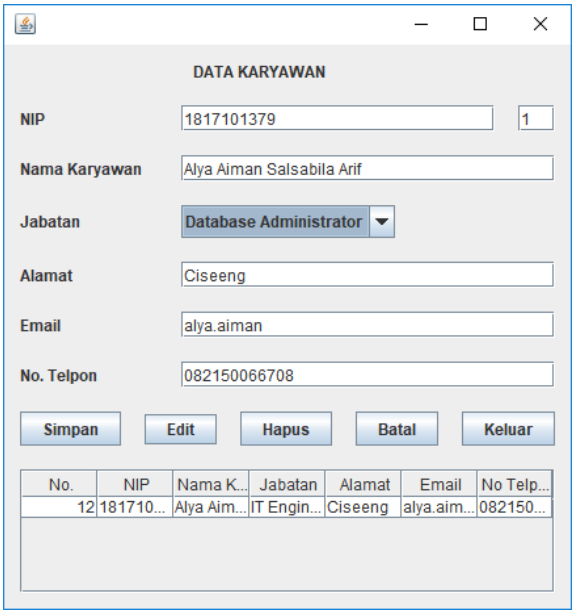

Masukkan data dan tekan *button* Simpan untuk menyimpan data



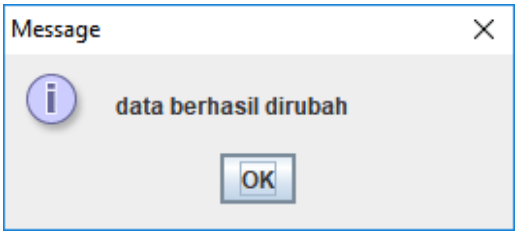

Program akan menampilkan sebagai berikut

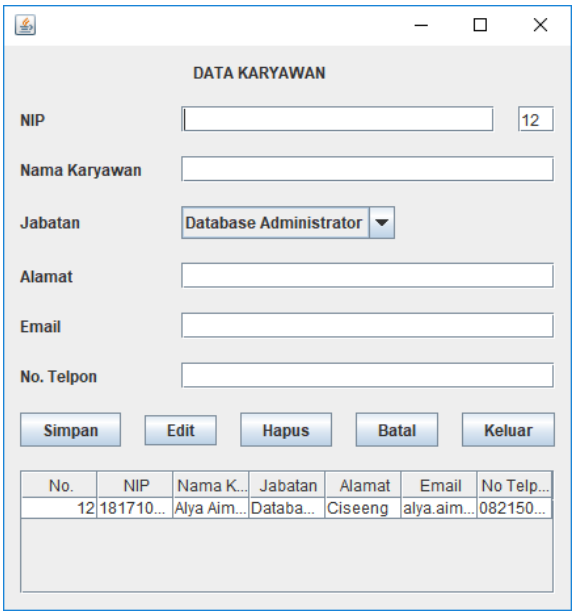



Untuk mengubah data, ubah teks yang terdapat di program dan klik *button* Rubah

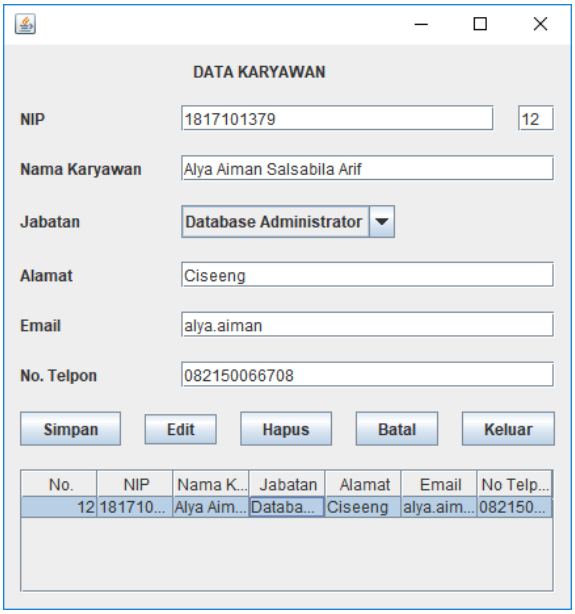



Program akan menampilkan sebagai berikut

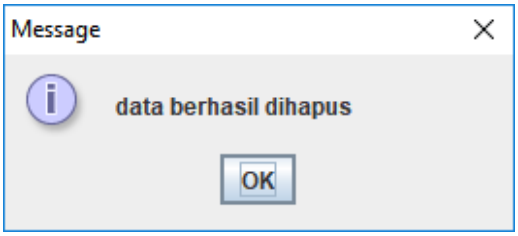


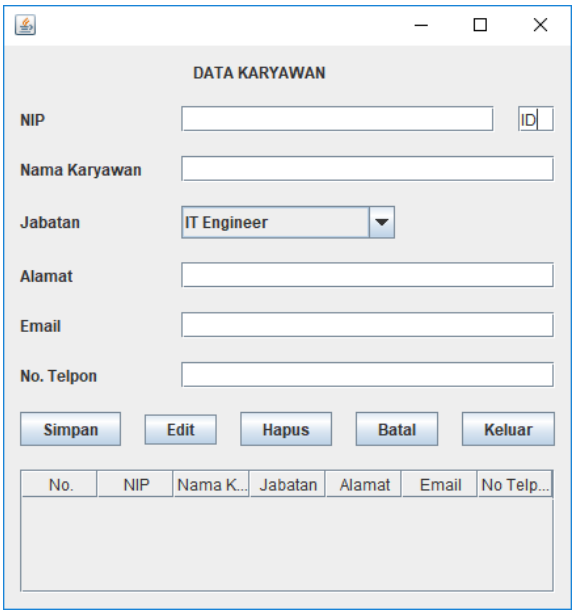




Untuk menghapus dapat klik tombol *button* Hapus

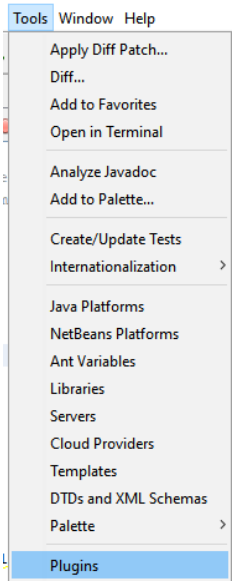



Program akan menampilkan sebagai berikut

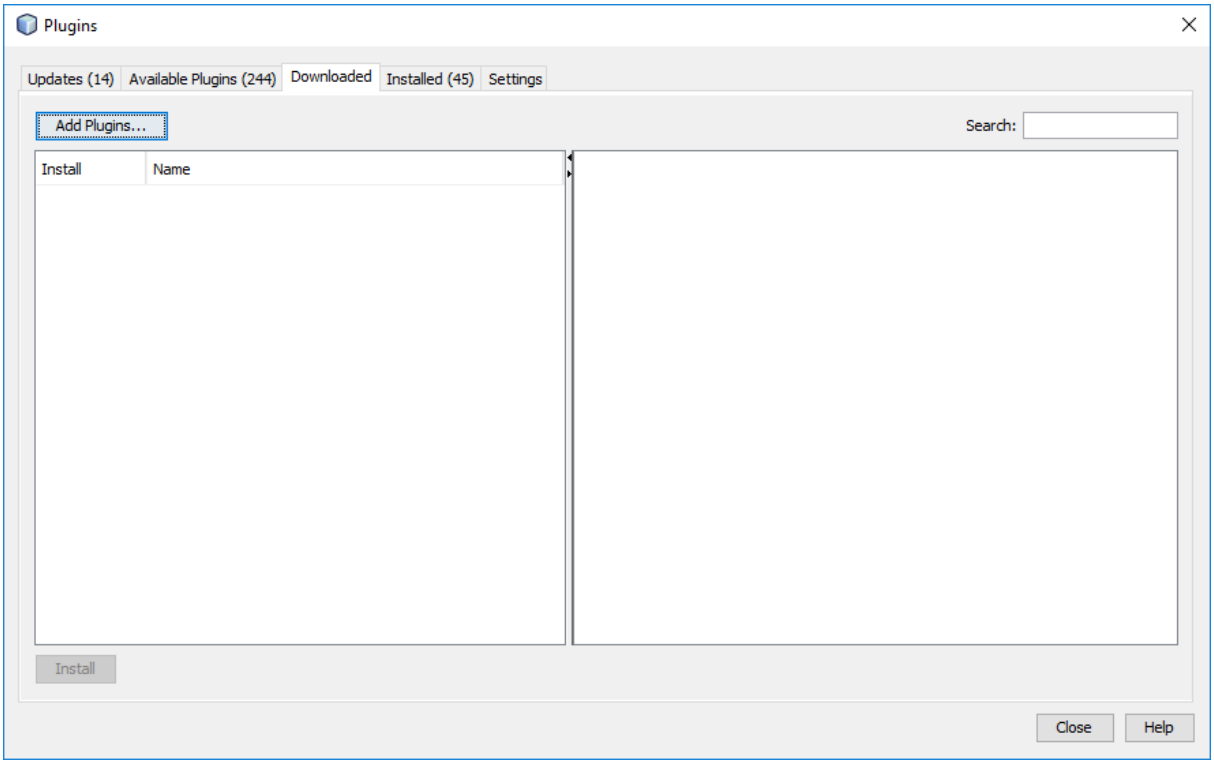


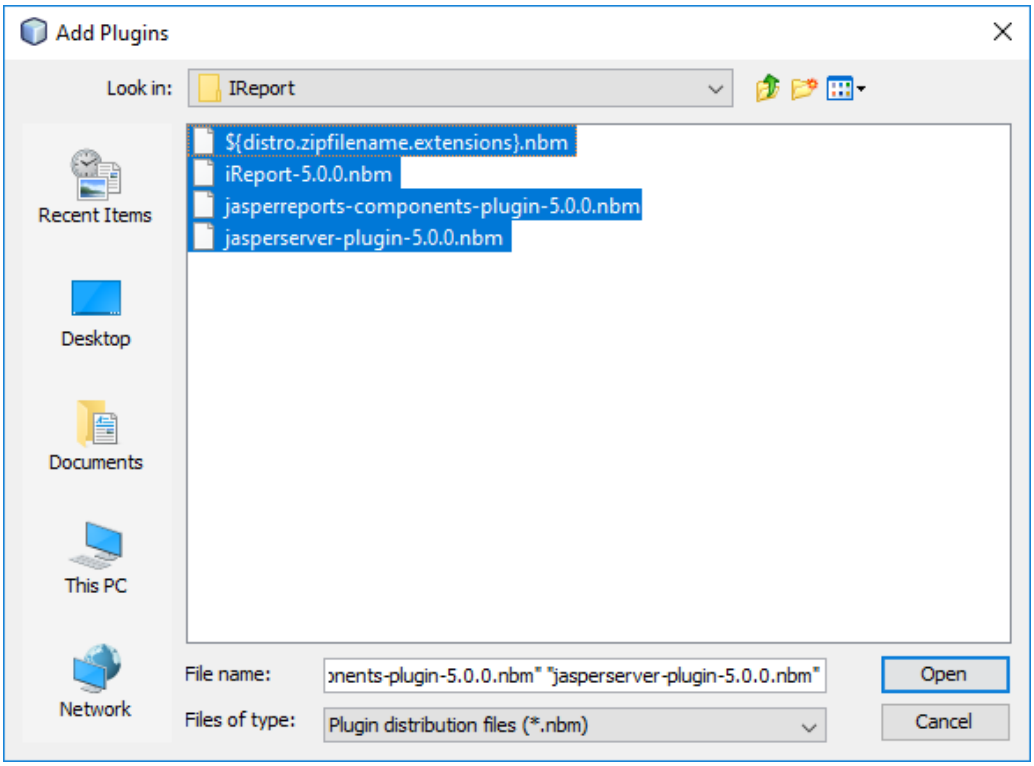
Lakukan instalasi iReport dengan cara berikut. Ekstrak iReport dan akan menemukan empat file dengan format file .nbm. Kemudian buka NetBeans, pilih menu *Tools* > *Plugins* > *(klik tab Downloaded)*



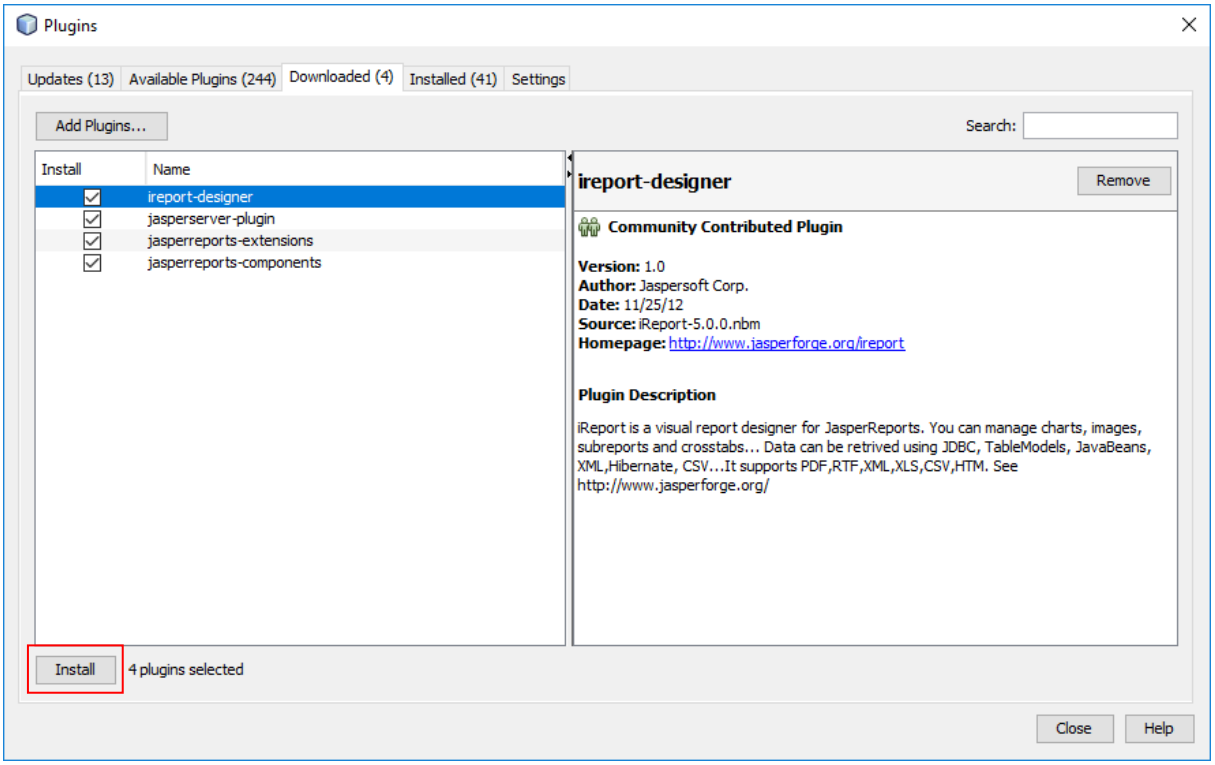

Klik *button* Add, cari file iReport yang sudah diekstrak sebelumnya



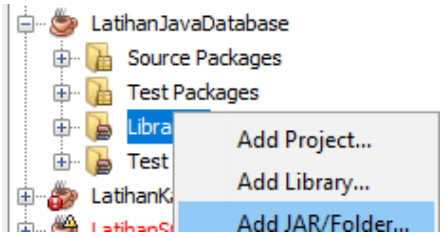
Setelah membuka folder yang diekstrak sebelumnya, CTRL + A, lalu pilih *Open* ke empat filenya



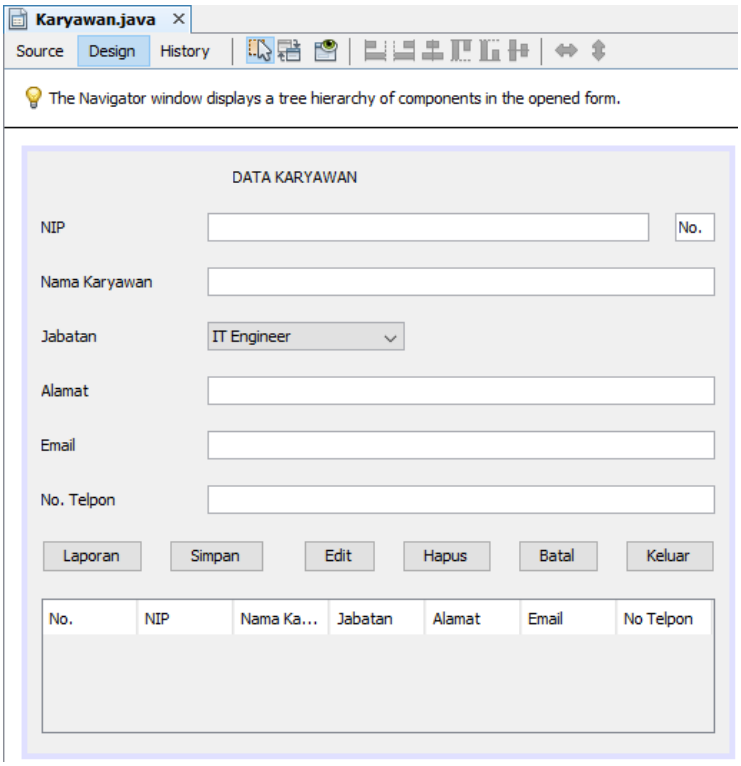

Pastikan sudah tercentang semua dan klik *Install*



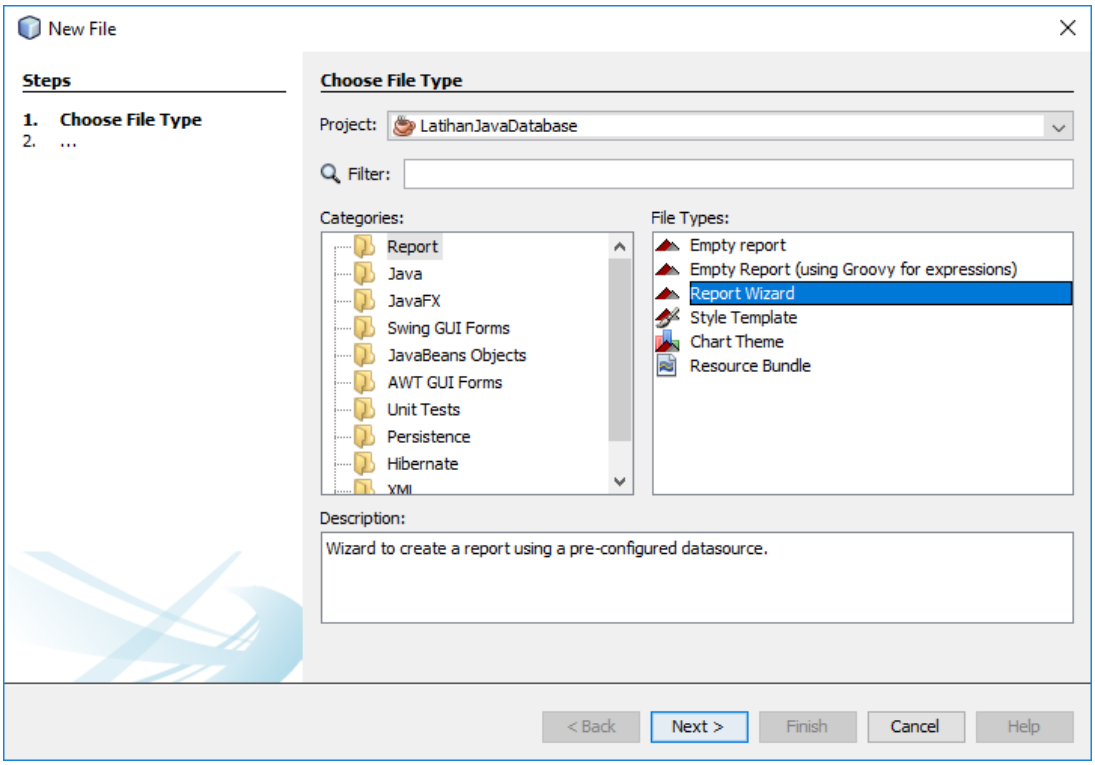
Tambahkan *library*



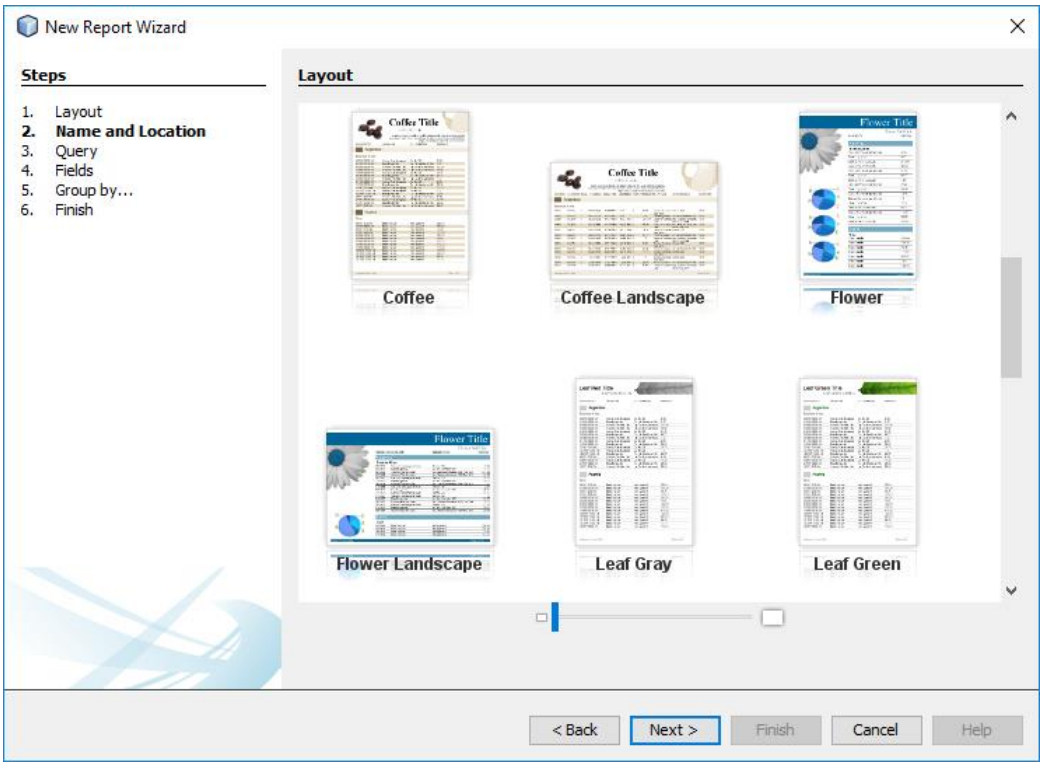

Modifikasi program yang sudah dibuat sebelumnya dengan menambahkan *button* laporan. Buatlah desain kelas Karyawan



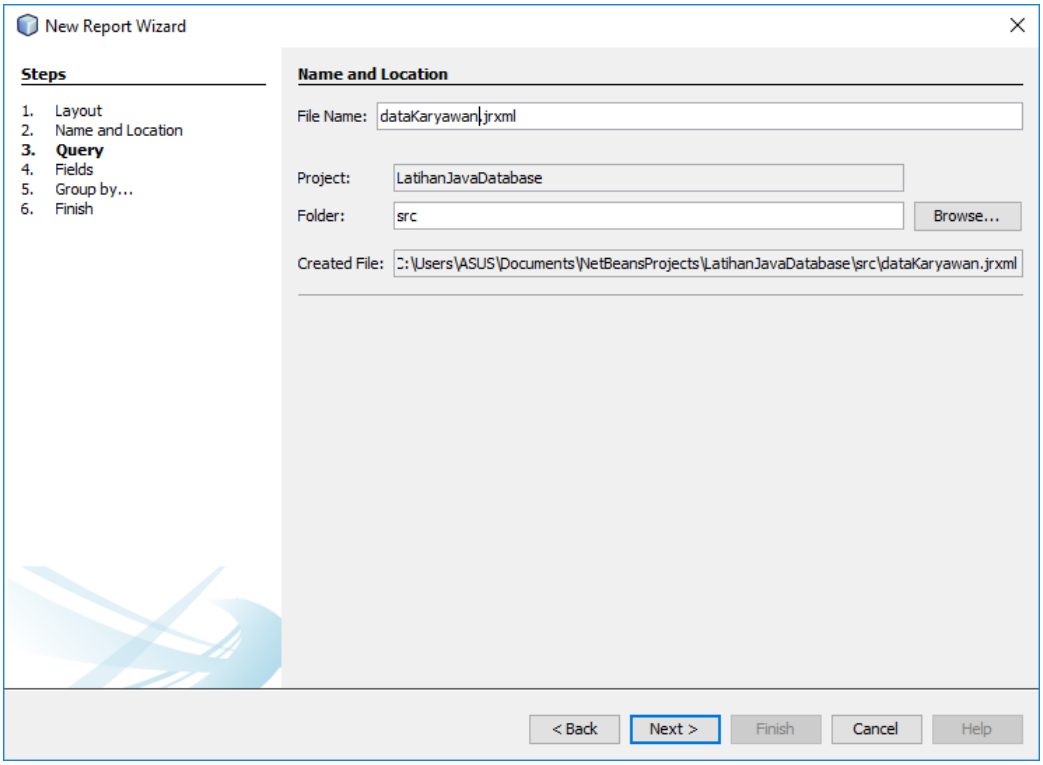
Pada *package project* yang dibuat sebelumnya, klik kanan, pilih *New* lalu *Other*, Cari *Report* dan pilih *Report Wizard*

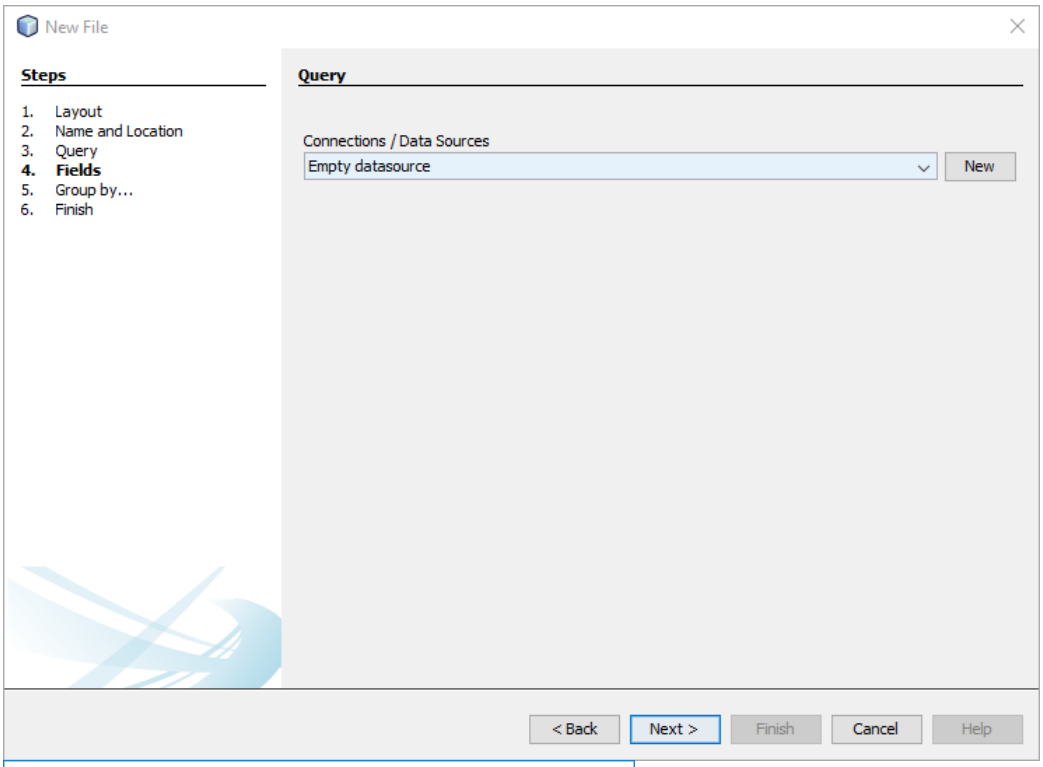


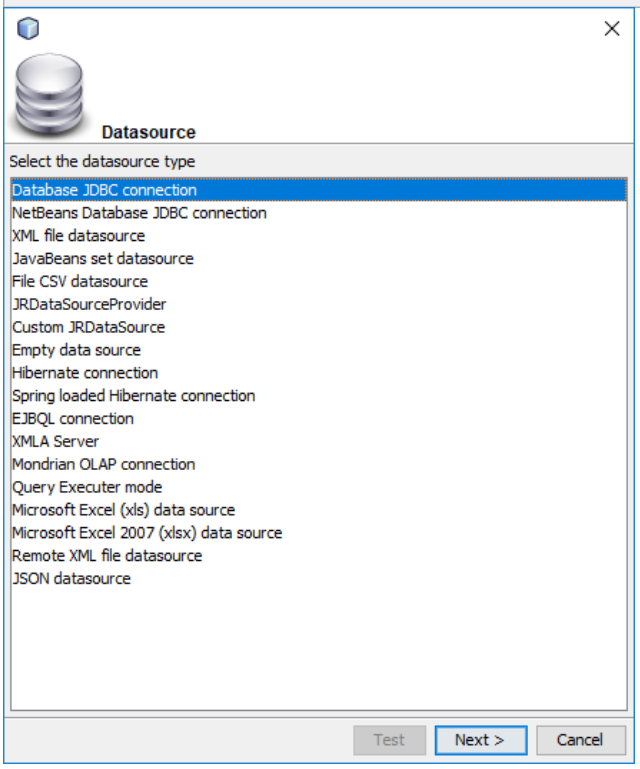
Pilih *layout* yang bagus (pastikan internet agar banyak pilihan *layout*) dan beri nama *report* sesuai keperluan dalam contoh ini menggunakan dataKaryawan.jrxml



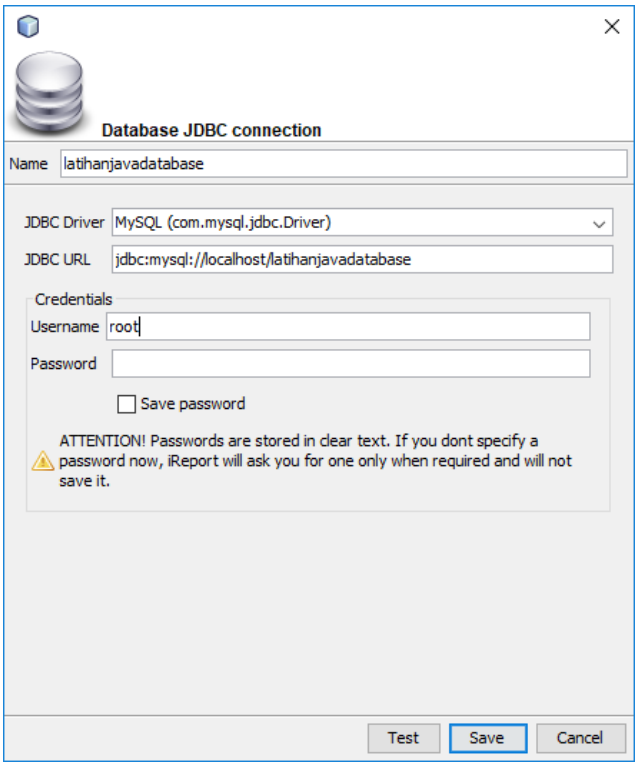

Klik *Next*



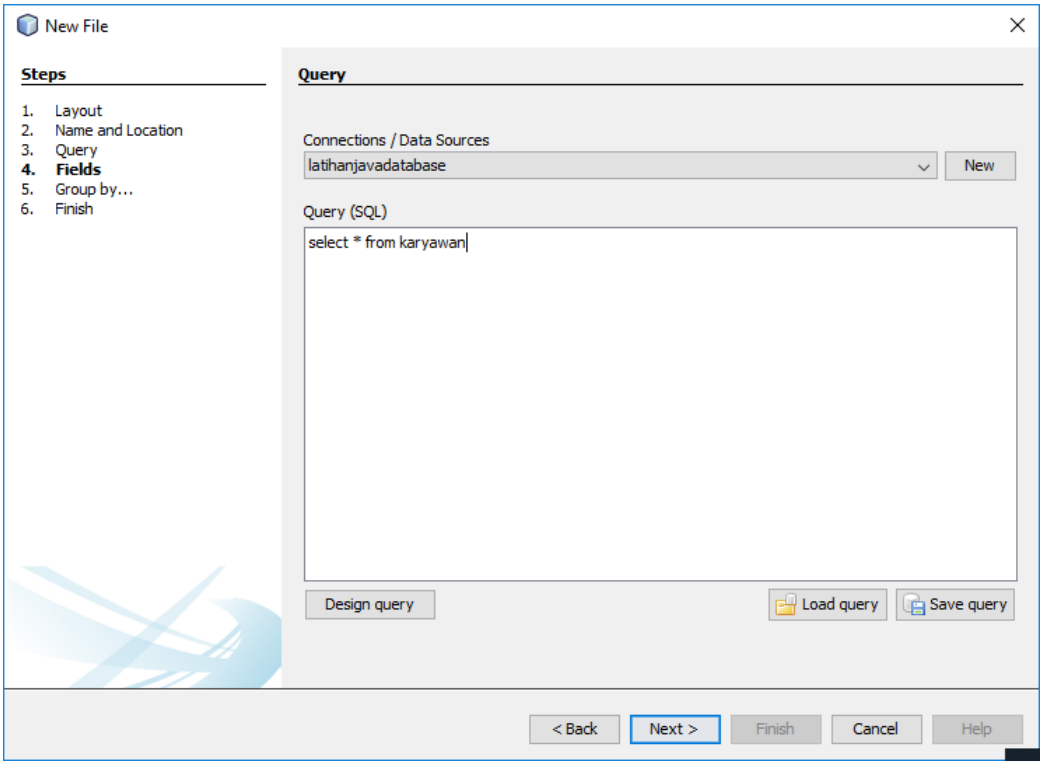

New File
Steps
1. Layout
2. Name and Location
3. Query
4. Fields
5. Group by...
6. Finish
Query
Connections / Data Sources
Empty datasource
New
< Back
Next >
Finish
Cancel
Help

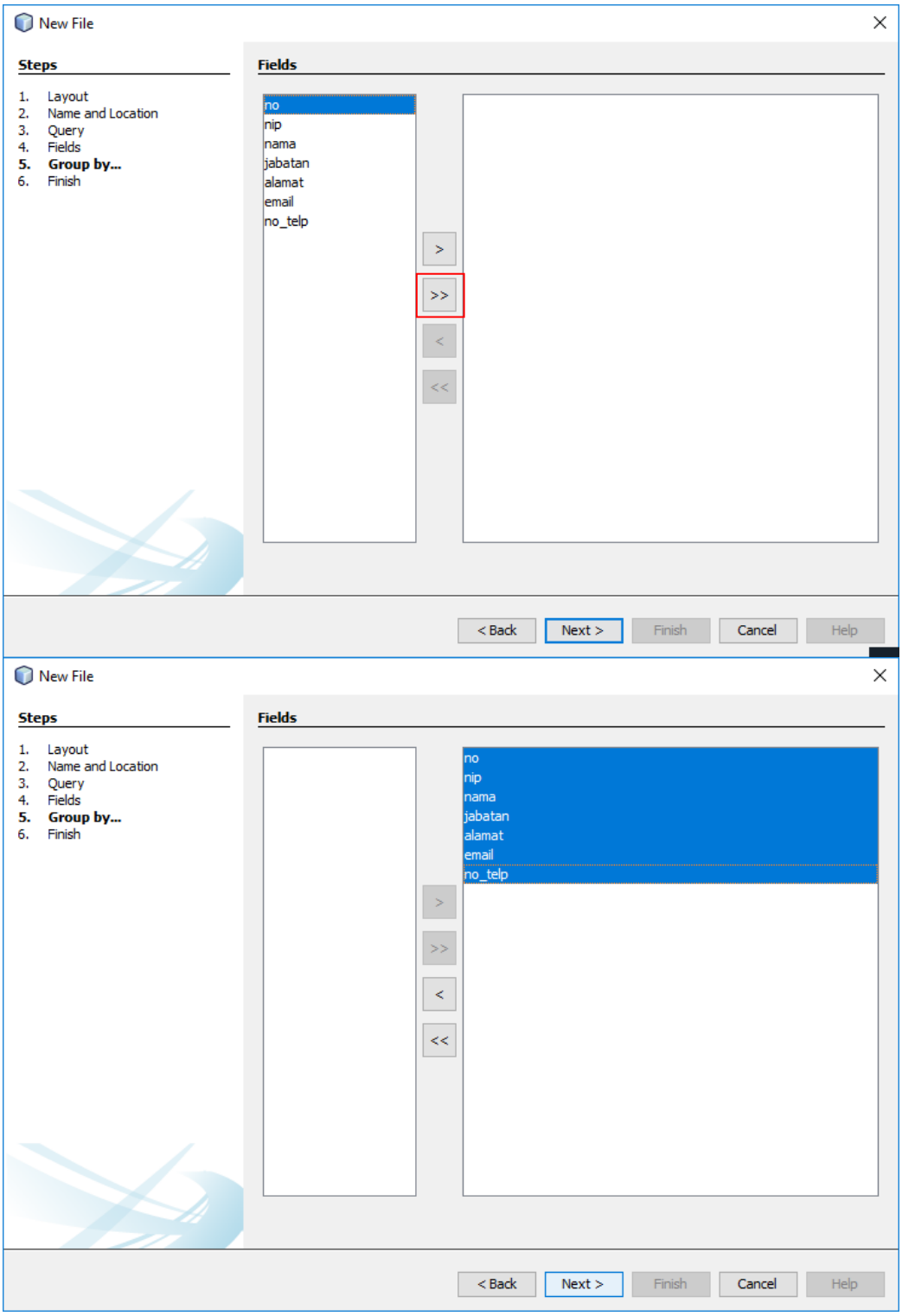

Datasource
Select the datasource type
Database JDBC connection
NetBeans Database JDBC connection
XML file datasource
JavaBeans set datasource
File CSV datasource
JRDataSourceProvider
Custom JRDataSource
Empty data source
Hibernate connection
Spring loaded Hibernate connection
EJBQL connection
XMLA Server
Mondrian OLAP connection
Query Executer mode
Microsoft Excel (xls) data source
Microsoft Excel 2007 (xlsx) data source
Remote XML file datasource
JSON datasource
Test
Next >
Cancel

Sebelum disimpan, pastikan klik *Test* dulu untuk menguji koneksi projek apakah berhasil terkoneksi ke MySQL tersebut

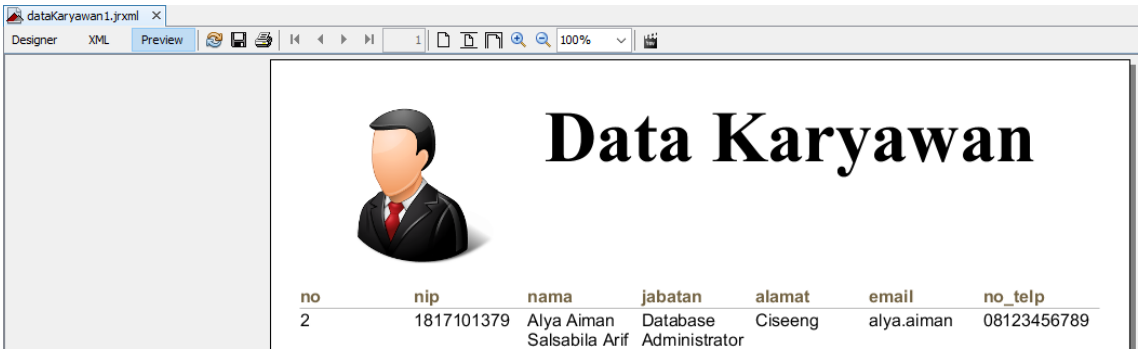



Masukkan kuerinya dari tabel tersebut

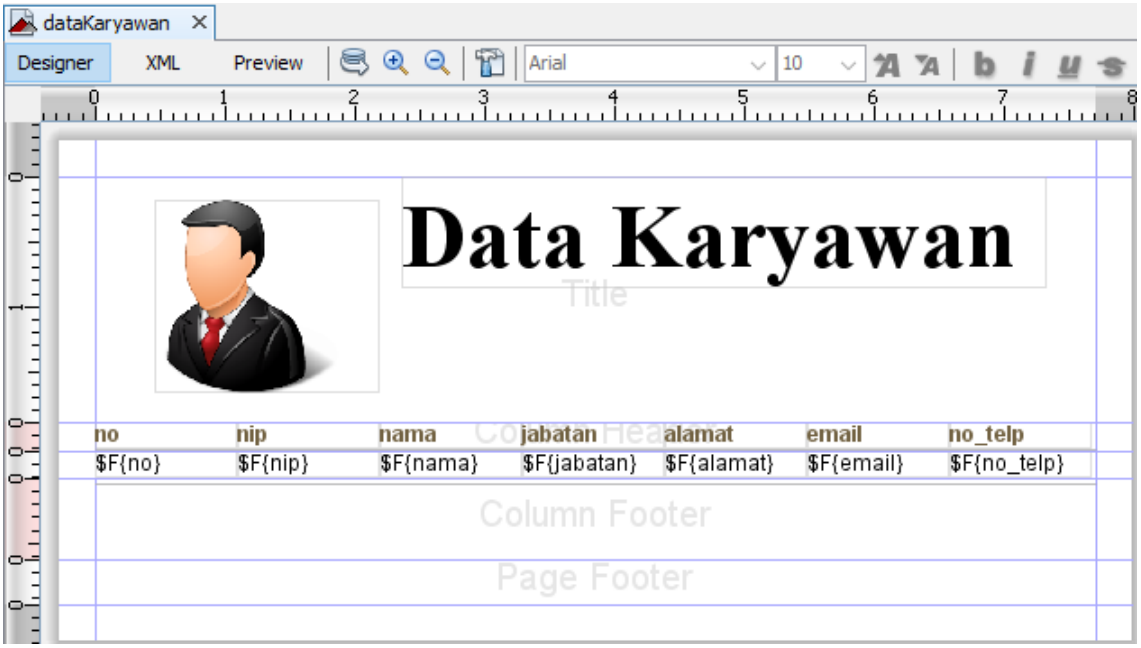



New File
Steps
1. Layout
2. Name and Location
3. Query
4. Fields
5. Group by...
6. Finish
Fields
no
nip
nama
jabatan
alamat
email
no_telp
>
>>
<
<<
< Back
Next >
Finish
Cancel
Help
New File
Steps
1. Layout
2. Name and Location
3. Query
4. Fields
5. Group by...
6. Finish
Fields
no
nip
nama
jabatan
alamat
email
no_telp
>
>>
<
<<
< Back
Next >
Finish
Cancel
Help

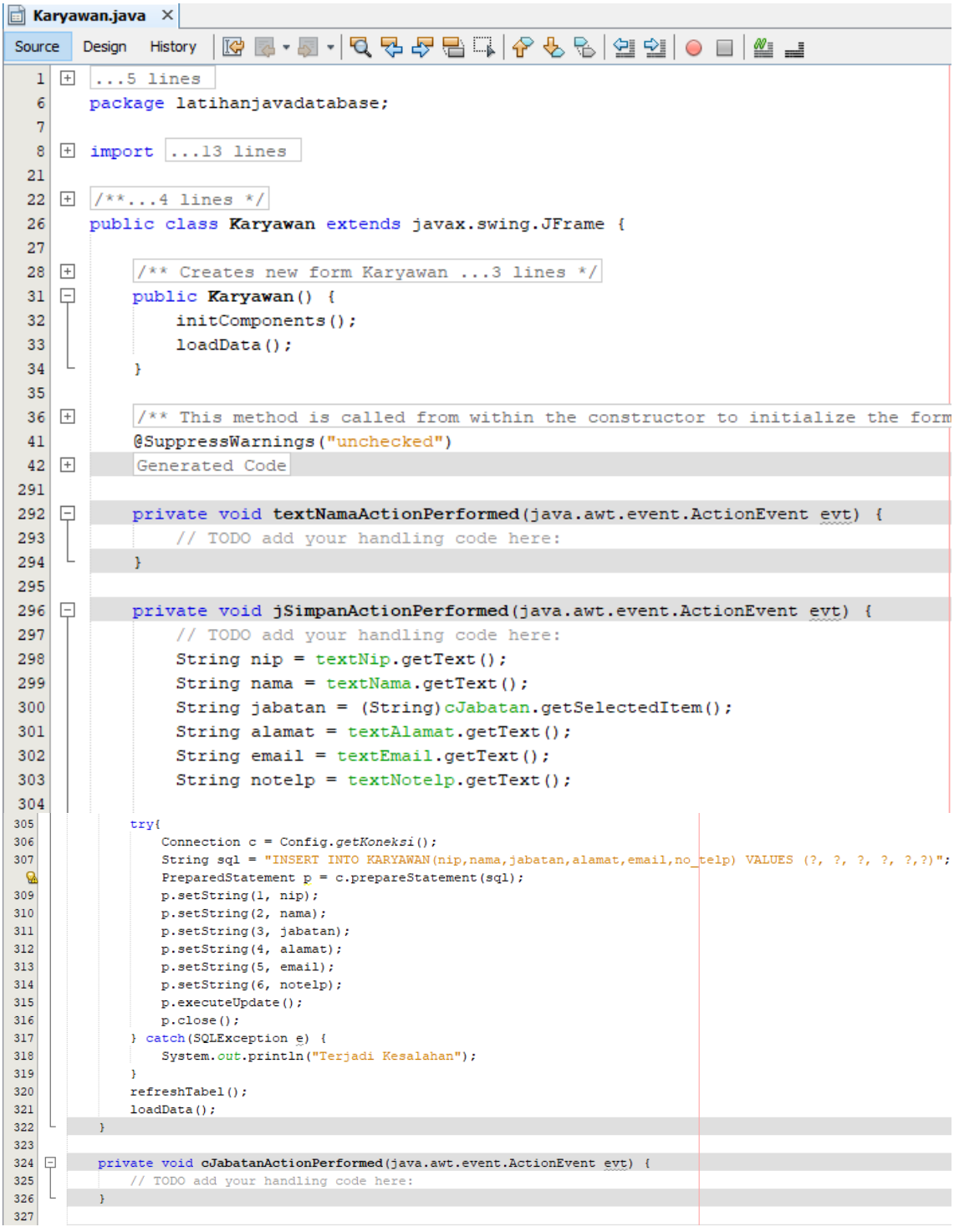
Kemudian klik tombol *Next* dan *Finish*. Buka file dataKaryawan.jrxml, klik *Preview* (pastikan tabel memiliki data). Sesuaikan *report* tersebut dengan projek




Untuk mengubah desain cukup edit di tab *Designer*.



Sekarang klik dua kali di tombol *button* laporan yang sudah dibuat sebelumnya. Masukkan *source code* sebagai berikut pada kelas Karyawan.java



```
Karyawan.java
Source  Design  History
...5 lines
package latihanjavadatabase;

import ...13 lines

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

    /** Creates new form Karyawan ...3 lines */
    public Karyawan() {
        initComponents();
        loadData();
    }

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

    private void textNamaActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
    }

    private void jSimpanActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
        String nip = textNip.getText();
        String nama = textNama.getText();
        String jabatan = (String)cJabatan.getSelectedItem();
        String alamat = textAlamat.getText();
        String email = textEmail.getText();
        String notelp = textNotelp.getText();

    try{
        Connection c = Config.getKoneksi();
        String sql = "INSERT INTO KARYAWAN(nip,nama,jabatan,alamat,email,no_telp) VALUES (?, ?, ?, ?, ?,?)";
        PreparedStatement p = c.prepareStatement(sql);
        p.setString(1, nip);
        p.setString(2, nama);
        p.setString(3, jabatan);
        p.setString(4, alamat);
        p.setString(5, email);
        p.setString(6, notelp);
        p.executeUpdate();
        p.close();
    } catch(SQLException e) {
        System.out.println("Terjadi Kesalahan");
    }
    refreshTabel();
    loadData();
    }

    private void cJabatanActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
    }
```

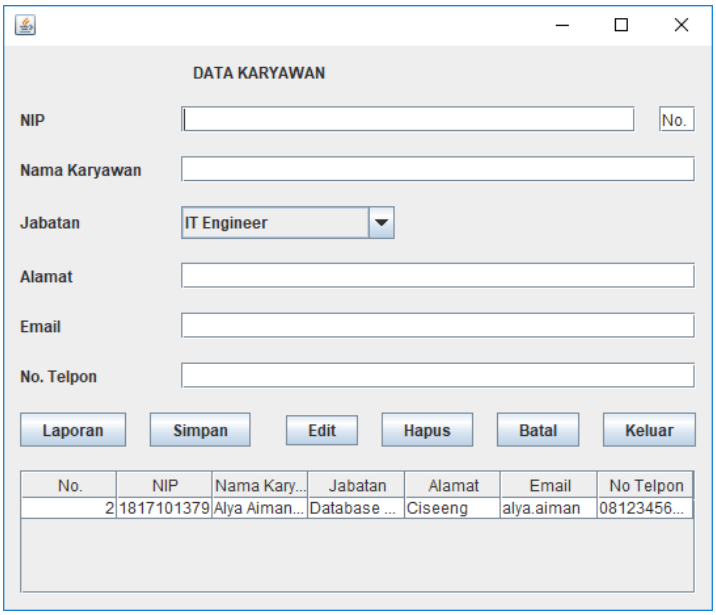
```
328     private void jHapusActionPerformed(java.awt.event.ActionEvent evt) {
329         // TODO add your handling code here:
330         String no = textNo.getText();
331         try{
332             Connection c = Config.getKoneksi();
333             String sql = "delete FROM KARYAWAN where no =?";
            PreparedStatement p = c.prepareStatement(sql);
335             p.setString(1,no);
336             p.executeUpdate();
337             p.close();
338             JOptionPane.showMessageDialog(this,"data berhasil dihapus");
339             refreshText();
340             refreshTabel();
341             loadData();
342         }
343         catch (SQLException ex){
344             System.out.println("Terjadi Kesalahan");
345         }
346         refreshTabel();
347         loadData();
348         refreshText();
349     }
350 
351     private void jKeluarActionPerformed(java.awt.event.ActionEvent evt) {
352         // TODO add your handling code here:
353         System.exit(0);
354     }
355 
356     private void jEditActionPerformed(java.awt.event.ActionEvent evt) {
357         // TODO add your handling code here:
358         String no = textNo.getText();
359         String nip = textNip.getText();
360         String nama = textNama.getText();
361         String jabatan = (String)cJabatan.getSelectedItem();
362         String alamat = textAlamat.getText();
363         String email = textEmail.getText();
364         String notelp = textNotelp.getText();
365 
366         try{
367             Connection c = Config.getKoneksi();
368             String sql = "UPDATE KARYAWAN SET nip=?,nama=?,jabatan=?,alamat=?,email=?,no_telp=? where no=?";
            PreparedStatement p = c.prepareStatement(sql);
370             p.setString(1, nip);
371             p.setString(2, nama);
372             p.setString(3, jabatan);
373             p.setString(4, alamat);
374             p.setString(5, email);
375             p.setString(6, notelp);
376             p.setString(7, no);
377             p.executeUpdate();
378             p.close();
379             JOptionPane.showMessageDialog(this, "data berhasil dirubah");
380         } catch(SQLException e) {
381             System.out.println("Terjadi Kesalahan");
382         }
383         refreshTabel();
384         loadData();
385         refreshText();
386     }
```

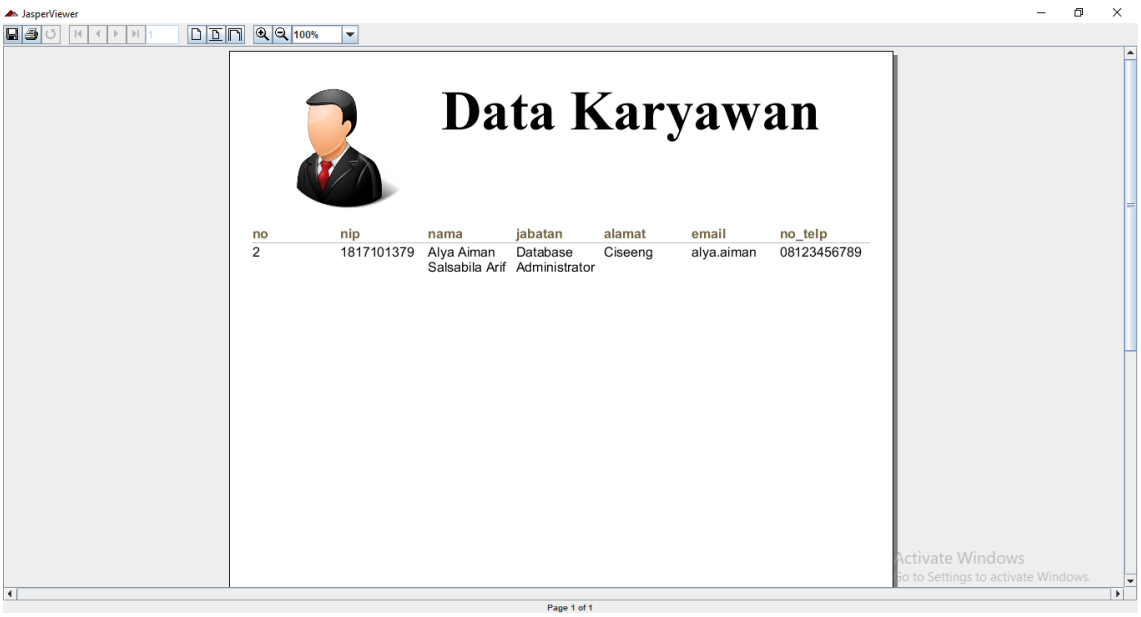
```
387
388     private void tabelKaryawanMouseClicked(java.awt.event.MouseEvent evt) {
389         // TODO add your handling code here:
390         int index = tabelKaryawan.getSelectedRow();
391         TableModel model = tabelKaryawan.getModel();
392         textNo.setText(model.getValueAt(index, 0).toString());
393         textNip.setText(model.getValueAt(index, 1).toString());
394         textNama.setText(model.getValueAt(index, 2).toString());
395         Object obj = tabelKaryawan.getValueAt(index,3);
396         cJabatan.setSelectedItem(obj);
397 
398         textAlamat.setText(model.getValueAt(index, 4).toString());
399         textEmail.setText(model.getValueAt(index, 5).toString());
400         textNotelp.setText(model.getValueAt(index, 6).toString());
401     }
402 
403     private void jBatalActionPerformed(java.awt.event.ActionEvent evt) {
404         // TODO add your handling code here:
405         refreshTabel();
406         loadData();
407         refreshText();
408     }
409 
```

```
410     private void tbLaporanActionPerformed(java.awt.event.ActionEvent evt) {
411         // TODO add your handling code here:
412         try {
413             JasperPrint jp = JasperFillManager.fillReport(getClass().getResourceAsStream("dataKaryawan.jasper"),
414                     null, Config.getKoneksi());
415             JasperViewer.viewReport(jp, false);
416         } catch(Exception e) {
417             JOptionPane.showMessageDialog(rootPane, e);
418         }
419     }
420 
421     private void loadData(){
422         try{
423             Connection c = Config.getKoneksi();
424             Statement s = c.createStatement();
425 
426             String sql = "SELECT * FROM KARYAWAN";
427             ResultSet r = s.executeQuery(sql);
428         while (r.next()) {
429             // lakukan penelusuran baris
430             String no = r.getString("no");
431             String nip = r.getString("nip");
432             String nama = r.getString("nama");
433             String jabatan = r.getString("jabatan");
434             String alamat = r.getString("alamat");
435             String email = r.getString("email");
436             String notelp = r.getString("no_telp");
437 
438             String tbData[] = {no,nip,nama,jabatan,alamat,email,notelp};
439 
```

```
440             DefaultTableModel tblModel = (DefaultTableModel)tabelKaryawan.getModel();
441             tblModel.addRow(tbData);
442             }
443         r.close();
444         s.close();
445         } catch(SQLException e) {
446             System.out.println("Terjadi Kesalahan");
447         }
448     }
449
450     private void refreshTabel(){
451         DefaultTableModel model =(DefaultTableModel)
452         tabelKaryawan.getModel();
453         while(model.getRowCount()>0){
454             model.setRowCount(0);
455         }
456     }
457
458     private void refreshText(){
459         textNip.setText("");
460         textNama.setText("");
461         textAlamat.setText("");
462         textEmail.setText("");
463         textNotelp.setText("");
464         textNip.requestFocus();
465     }
466
467     // Variables declaration - do not modify
468     private javax.swing.JComboBox<String> cJabatan;
469     private javax.swing.JButton jBatal;
470     private javax.swing.JButton jEdit;
471     private javax.swing.JButton jHapus;
472     private javax.swing.JButton jKeluar;
473     private javax.swing.JLabel jLabel1;
474     private javax.swing.JLabel jLabel2;
475     private javax.swing.JLabel jLabel3;
476     private javax.swing.JLabel jLabel4;
477     private javax.swing.JLabel jLabel5;
478     private javax.swing.JLabel jLabel6;
479     private javax.swing.JLabel jLabel7;
480     private javax.swing.JScrollPane jScrollPane1;
481     private javax.swing.JScrollPane jScrollPane2;
482     private javax.swing.JScrollPane jScrollPane3;
483     private javax.swing.JButton jSimpan;
484     private javax.swing.JTable jTable1;
485     private javax.swing.JTable jTable2;
486     private javax.swing.JTable tabelKaryawan;
487     private javax.swing.JButton tbLaporan;
488     private javax.swing.JTextField textAlamat;
489     private javax.swing.JTextField textEmail;
490     private javax.swing.JTextField textNama;
491     private javax.swing.JTextField textNip;
492     private javax.swing.JTextField textNo;
493     private javax.swing.JTextField textNotelp;
494     // End of variables declaration
495 }
```

Jalankan program dan klik *button* Laporan




Program akan menampilkan sebagai berikut