Tugas Crud sqlite

1. buat layout activity_main.xml

```xml
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"

    tools:context=".MainActivity" >

    <EditText
        android:id="@+id/editUsername"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_below="@+id/textView"
        android:layout_marginTop="34dp"
        android:ems="10"
        android:hint="Username"
        android:inputType="textPersonName" >

        <requestFocus />
    </EditText>

    <EditText
        android:id="@+id/editPassword"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_below="@+id/editUsername"
        android:layout_marginTop="15dp"
        android:ems="10"
        android:hint="Password"
        android:inputType="textPassword" />

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="36dp"
        android:text="FORM LOGIN"
        android:textColor="#00FFFF"
        android:textSize="25sp" />

    <Button
        android:id="@+id/BtnLogout"
        android:layout_width="85dp"
        android:layout_height="50dp"
        android:layout_alignBaseline="@+id/BtnLogin"
        android:layout_alignBottom="@+id/BtnLogin"
        android:layout_marginLeft="54dp"
        android:layout_toRightOf="@+id/BtnLogin"
        android:text="Logout" />

    <Button
        android:id="@+id/BtnLogin"
        android:layout_width="85dp"
```

```xml
                    android:layout_height="50dp"
                    android:layout_alignParentLeft="true"
                    android:layout_below="@+id/editPassword"
                    android:layout_marginLeft="37dp"
                    android:layout_marginTop="57dp"
                    android:text="Login" />

</RelativeLayout>
```

2. buat layout activity_data_pegawai.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent" >
    <EditText
        android:id="@+id/editNama"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_below="@+id/editID"
        android:ems="10"
        android:hint="Nama Lengkap"
        android:inputType="textPersonName" />

    <EditText
        android:id="@+id/editJabatan"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_below="@+id/editNama"
        android:ems="10"
        android:hint="Jabatan"
        android:inputType="textPersonName" />

    <EditText
        android:id="@+id/editAlamat"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_below="@+id/editJabatan"
        android:ems="10"
        android:hint="Alamat"
        android:inputType="textPersonName" />

    <Button
        android:id="@+id/btnSimpan"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@+id/editAlamat"
        android:layout_marginTop="15dp"
        android:text="Simpan Data" />

    <Button
        android:id="@+id/btnHapus"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_below="@+id/btnEdit"
        android:text="Hapus Data" />
```

```xml
        <Button
            android:id="@+id/btnTampil"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_alignParentLeft="true"
            android:layout_below="@+id/btnHapus"
            android:text="Tampilkan Seluruh Data" />

        <Button
            android:id="@+id/btnEdit"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_alignParentLeft="true"
            android:layout_below="@+id/btnSimpan"
            android:text="Edit Data" />

        <TextView
            android:id="@+id/textView2"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignParentTop="true"
            android:layout_centerHorizontal="true"
            android:layout_marginTop="16dp"
            android:text="Form Biodata Pegawai"
            android:textSize="18sp" />

        <EditText
            android:id="@+id/editID"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_alignParentLeft="true"
            android:layout_below="@+id/textView2"
            android:ems="10"
            android:hint="ID Pegawai"
            android:inputType="textPersonName" >

            <requestFocus />
        </EditText>

</RelativeLayout>
```

3. buat script pada MainActivity.java

```java
package com.example.desut;

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
import android.annotation.SuppressLint;
import android.app.Activity;
import android.content.Intent;

@SuppressLint("NewApi")
public class MainActivity extends Activity {

    private EditText username, password;
    private Button tmblLogin, tmblLogout;

    @Override
```

```java
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        username = (EditText) findViewById(R.id.editUsername);
        password = (EditText) findViewById(R.id.editPassword);

        tmblLogin = (Button) findViewById(R.id.BtnLogin);
        tmblLogout = (Button) findViewById(R.id.BtnLogout);

        tmblLogin.setOnClickListener(new View.OnClickListener() {

            public void onClick(View v) {

                String nama = username.getText().toString();
                String pass = password.getText().toString();

                if (nama.isEmpty() || pass.isEmpty()){
                  errorLogin();
                } else {
                    if (nama.equals("admin") && pass.equals("1234")){
                        sucseslogin();

                    } else {
                        errorLogin();
                    }
                }
            }
        });
        tmblLogout.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                System.exit(0);
            }
        });
    }
    public void errorLogin (){
      Toast.makeText(this, "Login Gagal",
        Toast.LENGTH_SHORT).show();
    }
    public void sucseslogin (){
      Toast.makeText(getApplicationContext(), "Login Sucses",
      Toast.LENGTH_SHORT).show();
      Intent intent = new Intent(MainActivity.this,DataPegawai.class);
      MainActivity.this.startActivity(intent);
      finish();

    }
}
```

4. buat class java dengan nama DBHelper

```java
package com.example.desut;
import android.content.ContentValues;
import android.content.Context;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;

public class DBHelper extends SQLiteOpenHelper {
    public static final String DATABASE_NAME = "biodata.db";
    public static final String TABLE_NAME = "tabel_pegawai";
```

```java
    public static final int DATABASE_VERSION = 1;
    public static final String COL_1 = "id";
    public static final String COL_2 = "nama";
    public static final String COL_3 = "jabatan";
    public static final String COL_4 = "alamat";

    public DBHelper(Context context){
        super(context, DATABASE_NAME, null, DATABASE_VERSION);
        SQLiteDatabase db = this.getWritableDatabase();
    }
    @Override
    public void onCreate(SQLiteDatabase db){
        db.execSQL("CREATE TABLE tabel_pegawai(id VARCHAR(8) PRIMARY KEY, "
                + "nama TEXT NULL, "
                + "jabatan TEXT NULL, "
                + "alamat TEXT NULL);");
    }
    @Override
    public void onUpgrade(SQLiteDatabase db, int oldVersion, int
newVersion){
        db.execSQL("DROP TABLE IF EXISTS " + TABLE_NAME);
        onCreate(db);
    }
    //Simpan Data
    public boolean insertData(String id, String nama, String jabatan,
String alamat){
        SQLiteDatabase db = this.getWritableDatabase();
        ContentValues contentValues = new ContentValues();
        contentValues.put(COL_1, id);
        contentValues.put(COL_2, nama);
        contentValues.put(COL_3, jabatan);
        contentValues.put(COL_4, alamat);
        long result = db.insert(TABLE_NAME, null, contentValues);
        if (result == -1)
            return false;
        else
            return true;
    }
    //Ambil Data
    public Cursor getAllData(){
        SQLiteDatabase db = this.getWritableDatabase();
        Cursor res = db.rawQuery("SELECT * FROM tabel_pegawai", null);
        return res;
    }
    //Ubah Data
    public boolean updateData(String id, String nama, String jabatan,
String alamat){
        SQLiteDatabase db = this.getWritableDatabase();
        ContentValues contentValues = new ContentValues();
        contentValues.put(COL_1, id);
        contentValues.put(COL_2, nama);
        contentValues.put(COL_3, jabatan);
        contentValues.put(COL_4, alamat);
        db.update(TABLE_NAME, contentValues, "ID = ?", new String[]{id});
        return true;
    }
    //Hapus Data
    public int deleteData(String nim){
        SQLiteDatabase db = this.getWritableDatabase();
        return db.delete(TABLE_NAME, "ID = ?", new String[]{nim});
    }
```

```
}
```

5. Buat class java dengan nama DataPegawai

```java
package com.example.desut;

import android.os.Bundle;
import android.app.Activity;
import android.app.AlertDialog;
import android.database.Cursor;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

public class DataPegawai extends Activity {
    DBHelper myDb;
    EditText edID, edNama, edJabatan, edAlamat;
    Button btnTambahData;
    Button btnTampilData;
    Button btnEditData;
    Button btnHapusData;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_data_pegawai);

        myDb = new DBHelper(this);
        edID = (EditText) findViewById(R.id.editID);
        edNama = (EditText) findViewById(R.id.editNama);
        edJabatan = (EditText) findViewById(R.id.editJabatan);
        edAlamat = (EditText) findViewById(R.id.editAlamat);
        btnTambahData = (Button) findViewById(R.id.btnSimpan);
        btnEditData = (Button) findViewById(R.id.btnEdit);
        btnHapusData = (Button) findViewById(R.id.btnHapus);
        btnTampilData = (Button) findViewById(R.id.btnTampil);

        addData();
        viewAll();
        updateData();
        deleteData();
    }
    //Simpan data
    public void addData(){
        btnTambahData.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                boolean isInserted =
myDb.insertData(edID.getText().toString(),
                        edNama.getText().toString(),
                        edJabatan.getText().toString(),
                        edAlamat.getText().toString());
                if (isInserted == true)
                    Toast.makeText(DataPegawai.this, "Data Berhasil
Disimpan", Toast.LENGTH_LONG).show();
                else
                    Toast.makeText(DataPegawai.this, "Data Gagal Disimpan",
Toast.LENGTH_LONG).show();
            }
        });
    }
```

```java
    //Edit Data
    public void updateData(){
        btnEditData.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                boolean isUpdate =
myDb.updateData(edID.getText().toString(),
                        edNama.getText().toString(),
                        edJabatan.getText().toString(),
                        edAlamat.getText().toString());
                if (isUpdate == true)
                    Toast.makeText(DataPegawai.this, "Data Berhasil
Diperbaharui", Toast.LENGTH_LONG).show();
                else
                    Toast.makeText(DataPegawai.this, "Data Gagal
Diperbaharui", Toast.LENGTH_LONG).show();
            }
        });
    }
    //Hapus Data
    public void deleteData(){
        btnHapusData.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Integer deletedRows =
myDb.deleteData(edID.getText().toString());
                if (deletedRows > 0)
                    Toast.makeText(DataPegawai.this, "Data Berhasil
Dihapus", Toast.LENGTH_LONG).show();
                else
                    Toast.makeText(DataPegawai.this, "Data Gagal Dihapus",
Toast.LENGTH_LONG).show();
            }
        });
    }
    //Tampil Seluruh Data
    public void viewAll(){
        btnTampilData.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Cursor res = myDb.getAllData();
                if (res.getCount() == 0) {
                    showMessage("Error", "Nothing Found");
                    return;
                }
                StringBuffer buffer = new StringBuffer();
                while (res.moveToNext()){
                    buffer.append("ID : " + res.getString(0)+"\n");
                    buffer.append("NAMA : " + res.getString(1)+"\n");
                    buffer.append("JABATAN : " + res.getString(2)+"\n");
                    buffer.append("ALAMAT : " + res.getString(3)+"\n");
                }
                showMessage("Data", buffer.toString());
            }
        });
    }
    //Alert Dialog
    public void showMessage(String title, String Message){
        AlertDialog.Builder builder = new AlertDialog.Builder(this);
        builder.setCancelable(true);
        builder.setTitle(title);
```

```
        builder.setMessage(Message);
        builder.show();
    }
}
```

6. **Buat activity baru pada AndroidManifest.xml dengan nama yang sama pada class java**

```xml
<activity
        android:name="DataPegawai"
        android:label="@string/app_name" >
        <intent-filter>
            <action android:name="android.intent.action.MAIN" />

            <category android:name="android.intent.category.LAUNCHER"
            />
        </intent-filter>
    </activity>
```