

TUGAS
WORKSHOP APLIKASI MOBILE
MANAJEMEN FILE PADA ANDROID DAN SQLITE



DISUSUN OLEH:

LIGA BAYU HERDIANTO

E41190139

TEKNIK INFORMATIKA
TEKNOLOGI INFORMASI
POLITEKNIK NEGERI JEMBER
TAHUN 2021

Dasar teori :

a. Manajemen file

Read dan Write file pada Android akan diperbantukan jika ingin untuk membaca data dari SD Card, menyimpan data aplikasi berupa text file. Data disimpan dalam file yang ditentukan oleh pengguna itu sendiri dan pengguna dapat mengakses file ini. File-file ini hanya dapat diakses hingga aplikasi ditutup atau yg telah memasang kartu SD pada perangkat.

b. SQLite

SQLite itu merupakan sebuah Database yang bersifat ACID-compliant dan memiliki ukuran pustaka kode yang relatif kecil, ditulis dalam bahasa C. SQLite merupakan proyek yang bersifat public domain yang dikerjakan oleh D. Richard Hipp. SQLite adalah sebuah open source database yang telah ada cukup lama, cukup stabil, dan sangat terkenal pada perangkat kecil, termasuk Android. Android menyediakan database relasional yang ringan untuk setiap aplikasi menggunakan SQLite. Aplikasi dapat mengambil keuntungan dari itu untuk mengatur relational database engine untuk menyimpan data secara aman dan efisien.

Kegiatan praktikum :

a. Manajemen file

1. Membuat new project dan mengubah source code MainActivity.java seperti dibawah ini.

```
1 package com.example.minggu7_manajemenfile;
2
3 import androidx.appcompat.app.AppCompatActivity;
4 import androidx.core.app.ActivityCompat;
5 import android.Manifest;
6 import android.content.Intent;
7 import android.os.Bundle;
8 import android.os.Environment;
9 import android.view.View;
10 import android.widget.EditText;
11 import android.widget.Toast;
12 import java.io.File;
13 import java.io.FileOutputStream;
14 import java.io.IOException;
15
16 public class MainActivity extends AppCompatActivity {
17     EditText editText;
18     private int STORAGE_PERMISSION_CODE = 23;
19
20     @Override
21     protected void onCreate(Bundle savedInstanceState) {
22         super.onCreate(savedInstanceState);
23         setContentView(R.layout.activity_main);
24         editText = (EditText) findViewById(R.id.editText2);
25     }
26
27     public void next(View view) {
28         Intent intent = new Intent(MainActivity.this, Main2Activity.class);
29         startActivity(intent);
30     }
31
32     public void savePublic(View view) {
33         ActivityCompat.requestPermissions(this, new String[]{Manifest.permission.READ_EXTERNAL_STORAGE},
34             STORAGE_PERMISSION_CODE);
35         String info = editText.getText().toString();
36         File folder = Environment.getExternalStoragePublicDirectory(Environment.DIRECTORY_DOWNLOADS);
37         File myFile = new File(folder, "myData1.txt");
38         writeData(myFile, info);
39         editText.setText("");
40     }
41
42     public void savePrivate(View view) {
43         String info = editText.getText().toString();
44         File folder = getExternalFilesDir("LigaBayu");
45         File myFile = new File(folder, "myData2.txt");
46         writeData(myFile, info);
47         editText.setText("");
48     }
49 }
```

```

50     private void writeData(File myFile, String data) {
51         FileOutputStream fileOutputStream = null;
52         try {
53             System.out.println("YES");
54             fileOutputStream = new FileOutputStream(myFile);
55             fileOutputStream.write(data.getBytes());
56             Toast.makeText( context: this, text: "Done" + myFile.getAbsolutePath(), Toast.LENGTH_SHORT).show();
57         } catch (Exception e){
58             e.printStackTrace();
59         } finally {
60             if (fileOutputStream != null) {
61                 try {
62                     fileOutputStream.close();
63                 } catch (IOException e) {
64                     e.printStackTrace();
65                 }
66             }
67         }
68     }
69 }

```

2. Membuat activity baru satu lagi untuk Main2Activity.java. Sama seperti di awal kita ubah source codenya menjadi seperti ini.

```

MainActivity.java x Main2Activity.java x
1     package com.example.minggu7_manajemenfile;
2
3     import androidx.appcompat.app.AppCompatActivity;
4     import android.content.Intent;
5     import android.os.Bundle;
6     import android.os.Environment;
7     import android.view.View;
8     import android.widget.TextView;
9     import java.io.File;
10    import java.io.FileInputStream;
11    import java.io.IOException;
12
13    public class Main2Activity extends AppCompatActivity {
14        TextView showText;
15
16        @Override
17        protected void onCreate(Bundle savedInstanceState) {
18            super.onCreate(savedInstanceState);
19            setContentView(R.layout.activity_main2);
20            showText = (TextView) findViewById(R.id.getText);
21        }
22
23        public void back(View view) {
24            Intent intent = new Intent( packageContext: Main2Activity.this, MainActivity.class);
25            startActivity(intent);
26        }
27    }

```

```

28     public void getPublic(View view) {
29         File folder = Environment.getExternalStoragePublicDirectory(Environment.DIRECTORY_DOWNLOADS);
30         File myFile = new File(folder, child: "myData1.txt");
31         String text = getdata(myFile);
32         if (text != null) {
33             showText.setText(text);
34         } else {
35             showText.setText("No Data");
36         }
37     }
38
39     public void getPrivate(View view) {
40         File folder = getExternalFilesDir( type: "LigaBayu");
41         File myFile = new File(folder, child: "myData2.txt");
42         String text = getdata(myFile);
43         if (text != null) {
44             showText.setText(text);
45         } else {
46             showText.setText("No Data");
47         }
48     }
49

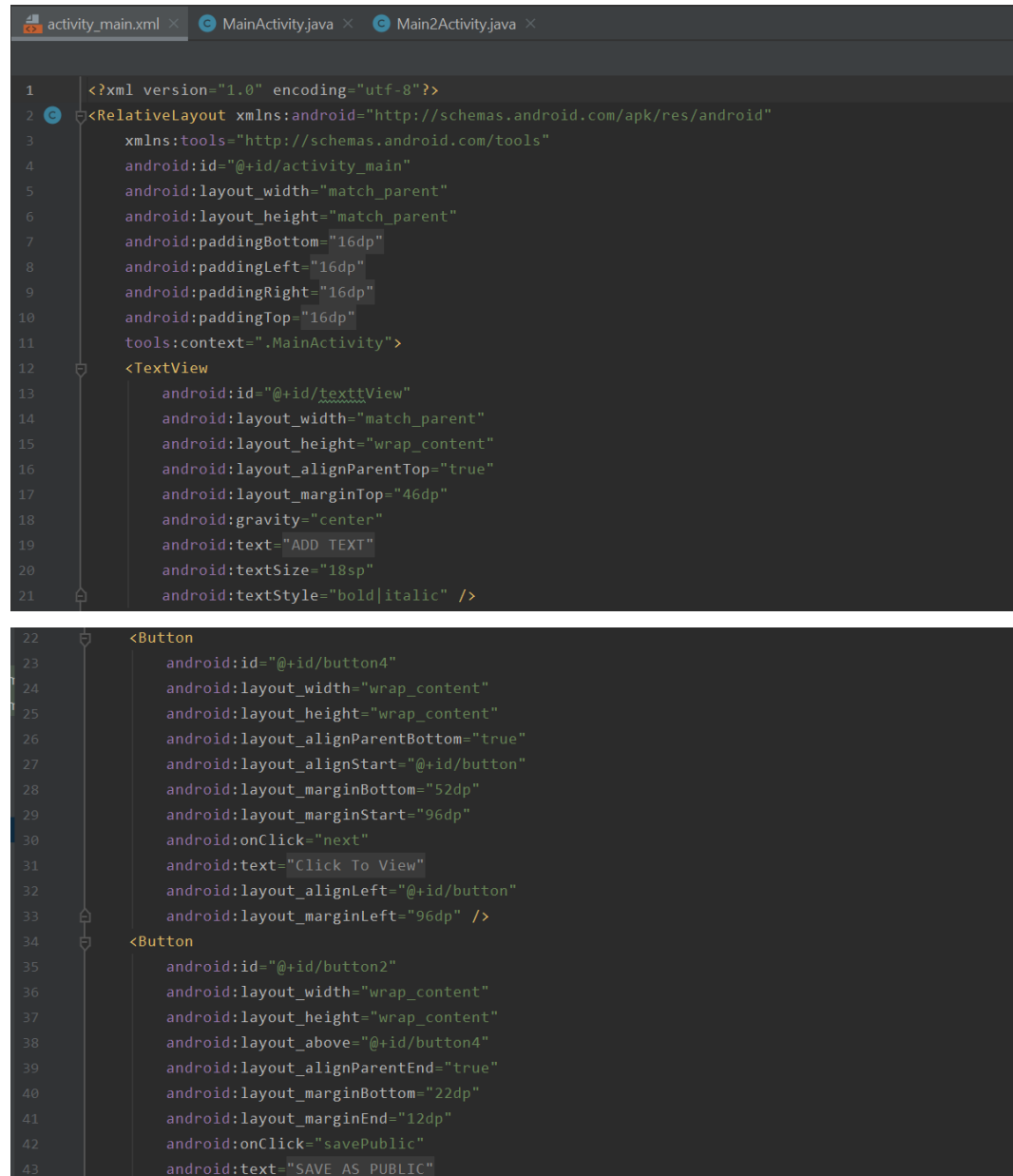
```

```

50 @ private String getdata(File myFile) {
51     FileInputStream fileInputStream = null;
52     try {
53         fileInputStream = new FileInputStream(myFile);
54         int i = -1;
55         StringBuffer buffer = new StringBuffer();
56         while ((i = fileInputStream.read()) != -1) {
57             buffer.append((char) i);
58         }
59         return buffer.toString();
60     } catch (Exception e) {
61         e.printStackTrace();
62     } finally {
63         if (fileInputStream != null) {
64             try {
65                 fileInputStream.close();
66             } catch (IOException e) {
67                 e.printStackTrace();
68             }
69         }
70     }
71     return null;
72 }
73

```

3. Menambahkan source code pada file activity_main.xml



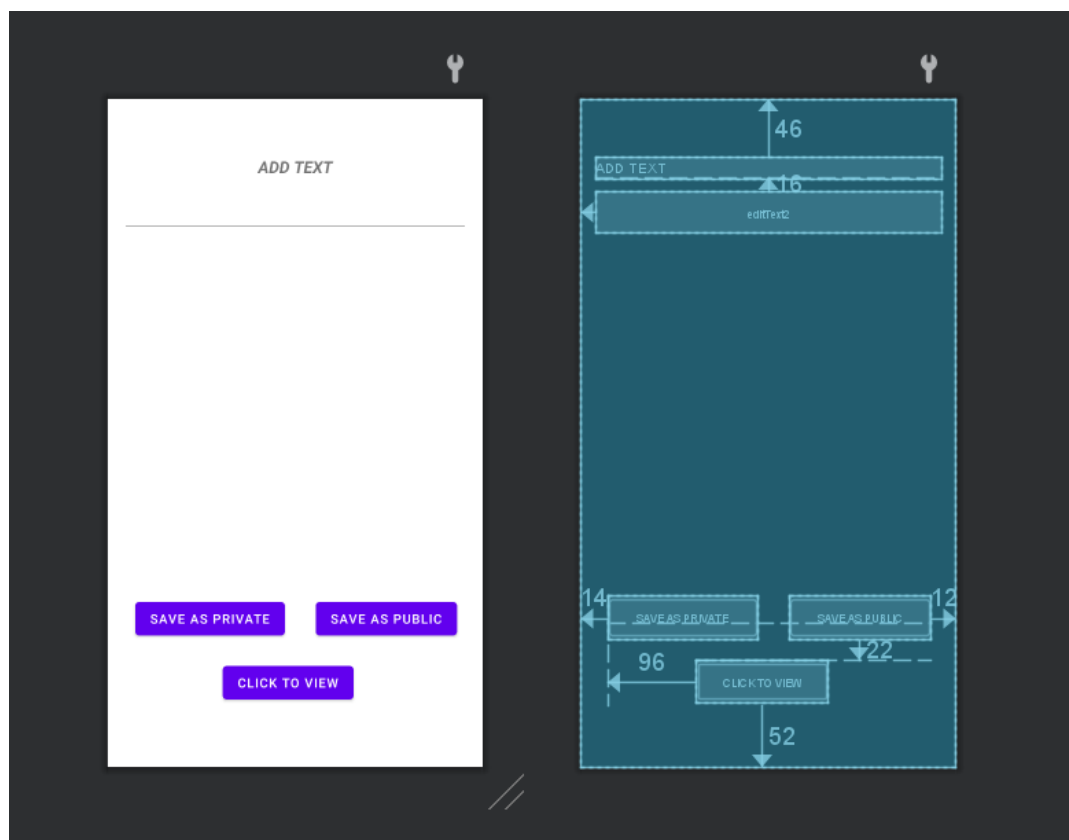
```
1  <?xml version="1.0" encoding="utf-8"?>
2  <RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      xmlns:tools="http://schemas.android.com/tools"
4      android:id="@+id/activity_main"
5      android:layout_width="match_parent"
6      android:layout_height="match_parent"
7      android:paddingBottom="16dp"
8      android:paddingLeft="16dp"
9      android:paddingRight="16dp"
10     android:paddingTop="16dp"
11     tools:context=".MainActivity">
12     <TextView
13         android:id="@+id/texttView"
14         android:layout_width="match_parent"
15         android:layout_height="wrap_content"
16         android:layout_alignParentTop="true"
17         android:layout_marginTop="46dp"
18         android:gravity="center"
19         android:text="ADD TEXT"
20         android:textSize="18sp"
21         android:textStyle="bold|italic" />
22
23     <Button
24         android:id="@+id/button4"
25         android:layout_width="wrap_content"
26         android:layout_height="wrap_content"
27         android:layout_alignParentBottom="true"
28         android:layout_alignStart="@+id/button"
29         android:layout_marginBottom="52dp"
30         android:layout_marginStart="96dp"
31         android:onClick="next"
32         android:text="Click To View"
33         android:layout_alignLeft="@+id/button"
34         android:layout_marginLeft="96dp" />
35
36     <Button
37         android:id="@+id/button2"
38         android:layout_width="wrap_content"
39         android:layout_height="wrap_content"
40         android:layout_above="@+id/button4"
41         android:layout_alignParentEnd="true"
42         android:layout_marginBottom="22dp"
43         android:layout_marginEnd="12dp"
44         android:onClick="savePublic"
45         android:text="SAVE AS PUBLIC" />
```

```

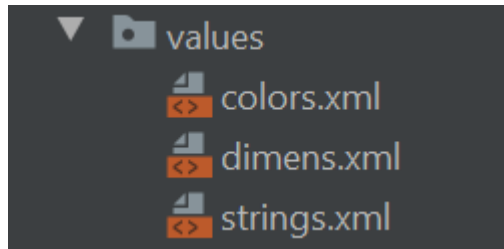
44         android:layout_alignParentRight="true"
45         android:layout_marginRight="12dp" />
46     <Button
47         android:id="@+id/button"
48         android:layout_width="wrap_content"
49         android:layout_height="wrap_content"
50         android:layout_alignBaseline="@+id/button2"
51         android:layout_alignBottom="@+id/button2"
52         android:layout_alignParentStart="true"
53         android:layout_marginStart="14dp"
54         android:onClick="savePrivate"
55         android:text="SAVE AS PRIVATE"
56         android:layout_alignParentLeft="true"
57         android:layout_marginLeft="14dp" />
58     <EditText
59         android:id="@+id/editText2"
60         android:layout_width="match_parent"
61         android:layout_height="wrap_content"
62         android:layout_alignParentStart="true"
63         android:layout_below="@+id/texttView"
64         android:layout_marginTop="16dp"
65         android:ems="10"
66         android:gravity="center_vertical|center"
67         android:inputType="textMultiline"
68         android:layout_alignParentLeft="true" />
69 </RelativeLayout>

```

4. Tampilan design pada file activity_main.xml.

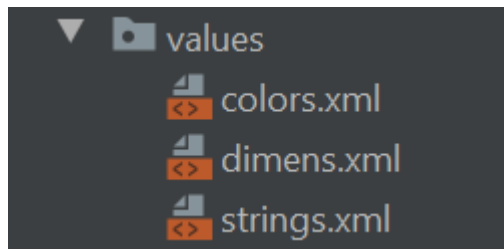


5. Setelah itu kita tambahkan source code pada res-value-dimens.xml



```
1 <?xml version="1.0" encoding="utf-8"?>
2 <resources>
3     <dimen name="activity_vertical_margin">16dp</dimen>
4     <dimen name="activity_horizontal_margin">16dp</dimen>
5 </resources>
```

6. Merubah source code pada res-values-colors.xml

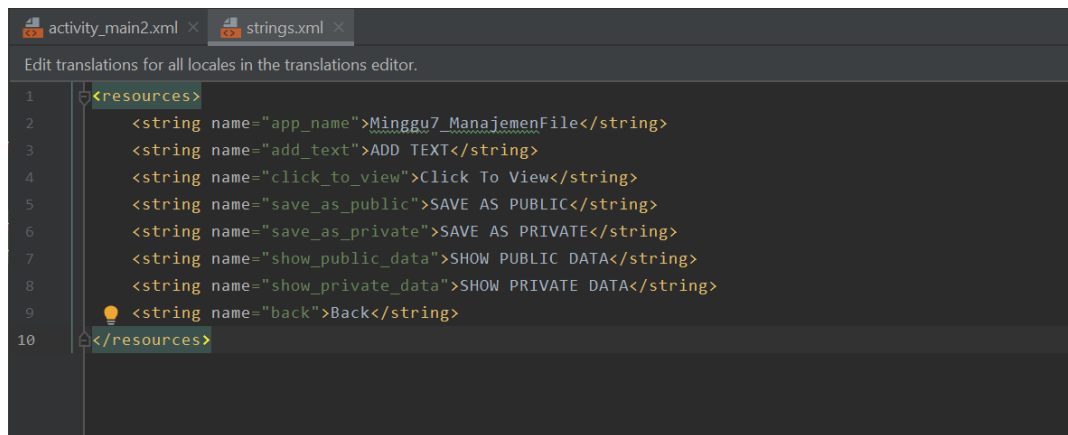
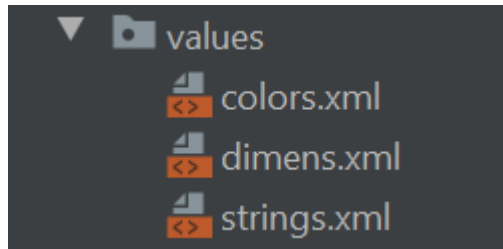


```
1 <?xml version="1.0" encoding="utf-8"?>
2 <resources>
3     <color name="purple_200">#FFBB86FC</color>
4     <color name="purple_500">#FF6200EE</color>
5     <color name="purple_700">#FF3700B3</color>
6     <color name="teal_200">#FF03DAC5</color>
7     <color name="teal_700">#FF018786</color>
8     <color name="black">#FF000000</color>
9     <color name="white">#FFFFFFFF</color>
10    <color name="colorPrimary">#3F51B5</color>
11    <color name="colorPrimaryDark">#303F9F</color>
12    <color name="colorAccent">#FF4081</color>
13 </resources>
```


7. Buka file `activity_main2.xml` untuk menambahkan source code seperti dibawah ini.

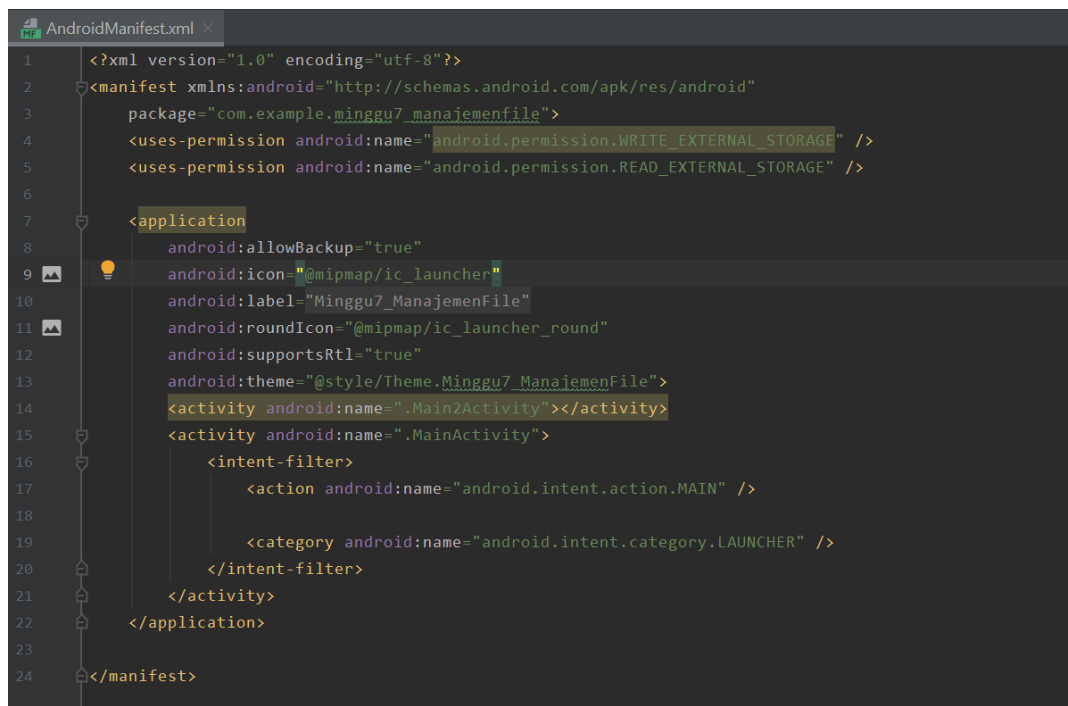
```
activity_main2.xml x
1  <?xml version="1.0" encoding="utf-8"?>
2  <RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      xmlns:tools="http://schemas.android.com/tools"
4      android:id="@+id/activity_main2"
5      android:layout_width="match_parent"
6      android:layout_height="match_parent"
7      android:paddingBottom="16dp"
8      android:paddingLeft="16dp"
9      android:paddingRight="16dp"
10     android:paddingTop="16dp"
11     tools:context=".Main2Activity">
12     <TextView
13         android:id="@+id/getText"
14         android:layout_width="match_parent"
15         android:layout_height="wrap_content"
16         android:layout_alignParentStart="true"
17         android:layout_alignParentTop="true"
18         android:layout_marginTop="33dp"
19         android:gravity="center"
20         android:text=""
21         android:textSize="18sp"
22         android:textStyle="bold|italic"
23         android:layout_alignParentLeft="true" />
24     <Button
25         android:id="@+id/button3"
26         android:layout_width="wrap_content"
27         android:layout_height="wrap_content"
28         android:layout_above="@+id/button5"
29         android:layout_alignParentEnd="true"
30         android:onClick="getPublic"
31         android:text="SHOW PUBLIC DATA"
32         android:textSize="13dp"
33         android:layout_alignParentRight="true" />
34     <Button
35         android:id="@+id/button2"
36         android:layout_width="wrap_content"
37         android:layout_height="wrap_content"
38         android:layout_below="@id/getText"
39         android:layout_marginTop="180dp"
40         android:onClick="getPrivate"
41         android:text="SHOW PRIVATE DATA"
42         android:textSize="13dp"
43         tools:ignore="UnknownId" />
44     <Button
45         android:id="@+id/button5"
46         android:layout_width="wrap_content"
47         android:layout_height="wrap_content"
48         android:layout_below="@+id/button2"
49         android:layout_centerHorizontal="true"
50         android:layout_marginTop="59dp"
51         android:onClick="back"
52         android:text="Back" />
53 </RelativeLayout>
```

8. Tambahkan source code berikut kedalam file string.xml



```
1 <resources>
2   <string name="app_name">Minggu7_ManajemenFile</string>
3   <string name="add_text">ADD TEXT</string>
4   <string name="click_to_view">Click To View</string>
5   <string name="save_as_public">SAVE AS PUBLIC</string>
6   <string name="save_as_private">SAVE AS PRIVATE</string>
7   <string name="show_public_data">SHOW PUBLIC DATA</string>
8   <string name="show_private_data">SHOW PRIVATE DATA</string>
9   <string name="back">Back</string>
10 </resources>
```

9. Terakhir kita harus mengatur file di AndroidManifest.xml.



```
1 <?xml version="1.0" encoding="utf-8"?>
2 <manifest xmlns:android="http://schemas.android.com/apk/res/android"
3     package="com.example.minggu7_manajemenfile">
4     <uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE" />
5     <uses-permission android:name="android.permission.READ_EXTERNAL_STORAGE" />
6
7     <application
8         android:allowBackup="true"
9         android:icon="@mipmap/ic_launcher"
10        android:label="Minggu7_ManajemenFile"
11        android:roundIcon="@mipmap/ic_launcher_round"
12        android:supportsRtl="true"
13        android:theme="@style/Theme.Minggu7_ManajemenFile">
14        <activity android:name=".Main2Activity"></activity>
15        <activity android:name=".MainActivity">
16            <intent-filter>
17                <action android:name="android.intent.action.MAIN" />
18
19                <category android:name="android.intent.category.LAUNCHER" />
20            </intent-filter>
21        </activity>
22    </application>
23
24 </manifest>
```

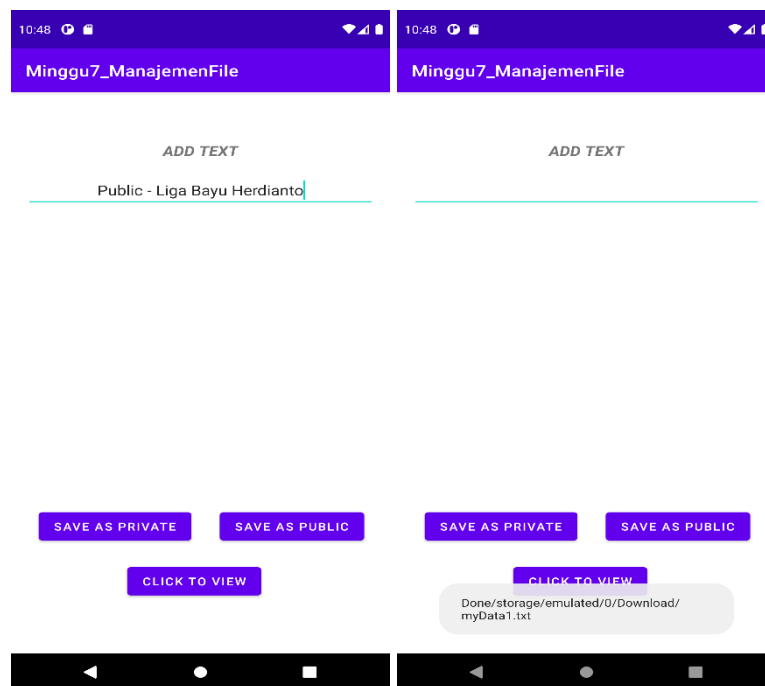
10. Coba jalankan maka akan menghasilkan tampilan sebagai berikut.

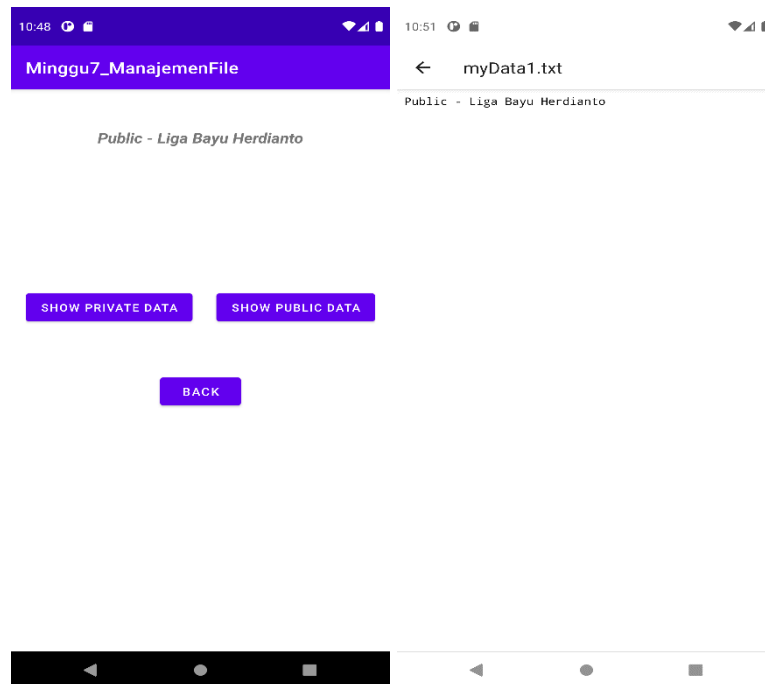
- Private file



Ketika kita klik button save as private maka akan ada pemberitahuan jika perintah done dan akan masuk atau disimpan distorage/emulated/0/Android/data/com.example.minggu7_manajemenfile/file/LigaBayu/myData2.txt. Saat file myData2. txt dibuka maka akan menampilkan text yang sudah diinputkan di awal sebelum klik save as.

- Public file





Ketika kita klik button save as public maka akan ada pemberitahuan jika perintah done dan akan masuk atau disimpan distorage/emulated/0/Download/myData1.txt. Saat file myData1. txt dibuka maka akan menampilkan text yang sudah diinputkan di awal sebelum klik save as.

b. SQLite

1. Membuat new project dan membuat satu activity dengan nama DataHelper.java yang akan kita tambah source code sebagai berikut.

```
DataHelper.java
1  package com.example.minggu7_sqlite;
2
3  import android.content.Context;
4  import android.database.sqlite.SQLiteDatabase;
5  import android.database.sqlite.SQLiteOpenHelper;
6  import android.util.Log;
7
8  public class DataHelper extends SQLiteOpenHelper {
9
10     private static final String DATABASE_NAME = "biadatadiri.db";
11     private static final int DATABASE_VERSION = 1;
12
13     public DataHelper(Context context) { super(context, DATABASE_NAME, factory: null, DATABASE_VERSION); }
14
15     @Override
16     public void onCreate(SQLiteDatabase db) {
17         String sql = "create table biodata " +
18             "(no integer primary key, nama text null, tgl text null, jk text null, alamat text null)";
19         Log.d( tag: "Data", msg: "onCreate:" + sql);
20         db.execSQL(sql);
21         sql = "INSERT INTO biodata (no, nama, tgl, jk, alamat) VALUES " +
22             "( '1', 'Darsiwan', '1996-07-12', 'Laki-laki', 'Indramayu' )";
23         db.execSQL(sql);
24     }
25
26     @Override
27     public void onUpgrade(SQLiteDatabase arg0, int arg1, int arg2) {
28     }
29 }
```

2. Setelah itu kita akan membuat layout pertama pada file activity_main.xml.

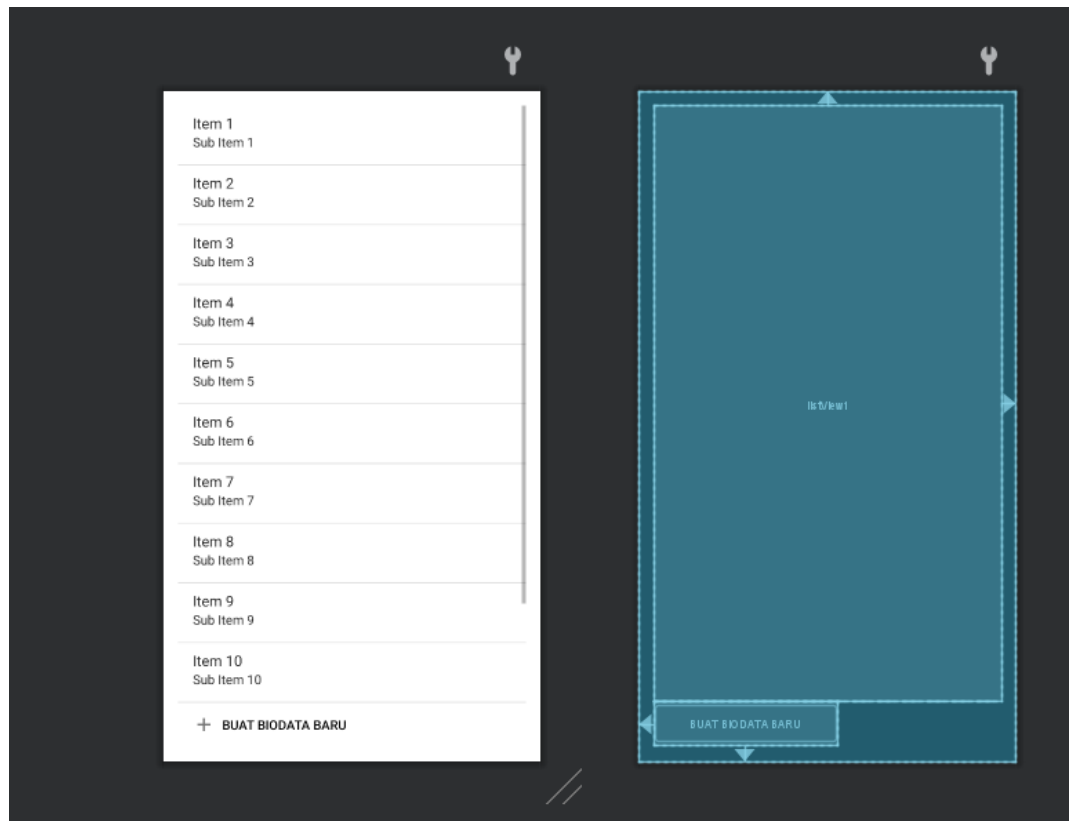
```
DataHelper.java × activity_main.xml ×
1  <?xml version="1.0" encoding="utf-8"?>
2  <RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      xmlns:app="http://schemas.android.com/apk/res-auto"
4      xmlns:tools="http://schemas.android.com/tools"
5      android:layout_width="match_parent"
6      android:layout_height="match_parent"
7      android:paddingBottom="16dp"
8      android:paddingLeft="16dp"
9      android:paddingRight="16dp"
10     android:paddingTop="16dp"
11     tools:context=".DataHelper">
12
13     <ListView
14         android:id="@+id/listView1"
15         android:layout_width="match_parent"
16         android:layout_height="wrap_content"
17         android:layout_alignParentTop="true"
18         android:layout_alignParentRight="true"
19         android:layout_alignParentEnd="true"
20         android:layout_above="@+id/button2"
21         tools:ignore="UnknownId" />
22
23     <Button
24         android:id="@+id/button2"
25         android:layout_width="wrap_content"
26         android:layout_height="wrap_content"
```

```

26         style="?android:attr/borderlessButtonStyle"
27         +         android:drawableLeft="@drawable/ic_baseline_add_24"
28         android:text="Buat Biodata Baru"
29         ■         android:textColor="@color/black"
30         android:layout_alignParentBottom="true"
31         android:layout_alignParentLeft="true"
32         △         android:layout_alignParentStart="true" />
33
34     </RelativeLayout>
35

```

3. Tampilan Layout dari file activity_main.xml.



4. Kita berikan perintah dengan cara menuliskan beberapa source code pada file MainActivity.java.

```
MainActivity.java x DataHelper.java x activity_main.xml x
1 package com.example.minggu7_sqlite;
2
3 import androidx.appcompat.app.AlertDialog;
4 import androidx.appcompat.app.AppCompatActivity;
5 import android.content.DialogInterface;
6 import android.content.Intent;
7 import android.database.Cursor;
8 import android.database.sqlite.SQLiteDatabase;
9 import android.os.Bundle;
10 import android.view.Menu;
11 import android.view.View;
12 import android.widget.AdapterView;
13 import android.widget.AdapterView.OnItemClickListener;
14 import android.widget.ArrayAdapter;
15 import android.widget.Button;
16 import android.widget.ListView;
17
18 public class MainActivity extends AppCompatActivity {
19     String[] daftar;
20     ListView listView01;
21     Menu menu;
22     protected Cursor cursor;
23     DataHelper dbcenter;
24     public static MainActivity ma;
25
26     @Override
27     protected void onCreate(Bundle savedInstanceState) {
28         super.onCreate(savedInstanceState);
29
30         setContentView(R.layout.activity_main);
31
32         Button btn=(Button)findViewById(R.id.button2);
33         btn.setOnClickListener(new View.OnClickListener() {
34             @Override
35             public void onClick(View arg0){
36                 Intent inte = new Intent( packageContext: MainActivity.this,BuatBiodata.class);
37                 startActivity(inte);
38             }
39         });
40         ma = this;
41         dbcenter = new DataHelper( context: this);
42         RefreshList();
43     }
44
45     void RefreshList() {
46         SQLiteDatabase db = dbcenter.getReadableDatabase();
47         cursor = db.rawQuery( sql: "SELECT*FROM biodata", selectionArgs: null);
48         daftar = new String[cursor.getCount()];
49         cursor.moveToFirst();
50         for (int cc=0; cc<cursor.getCount(); cc++){
51             cursor.moveToPosition(cc);
52             daftar[cc]=cursor.getString( columnIndex: 1).toString();
53         }
54         listView01 = (ListView)findViewById(R.id.listView1);
55
56         listView01.setAdapter(new ArrayAdapter( context: this, android.R.layout.simple_list_item_1, daftar));
57         listView01.setSelected(true);
58
59         listView01.setOnItemClickListener(new AdapterView.OnItemClickListener() {
60             @Override
61             public void onItemClick(AdapterView arg0, View arg1, int arg2, long arg3) {
62                 final String selection = daftar[arg2];
63                 final CharSequence[] dialogitem = {"Lihat Biodata","Update Biodata","Hapus Biodata"};
64                 AlertDialog.Builder builder = new AlertDialog.Builder( context: MainActivity.this);
```



```

61         builder.setTitle("Pilihan");
62         builder.setItems(dialogitem, new DialogInterface.OnClickListener() {
63             @Override
64             public void onClick(DialogInterface dialog, int item) {
65                 switch (item){
66                     case 0:
67                         Intent i = new Intent(getApplicationContext(), LihatBiodata.class);
68                         i.putExtra( name: "nama",selection);
69                         startActivity(i);
70                         break;
71                     case 1:
72                         Intent in = new Intent(getApplicationContext(), UpdateBiodata.class);
73                         in.putExtra( name: "nama",selection);
74                         startActivity(in);
75                         break;
76                     case 2:
77                         SQLiteDatabase db = dbcenter.getWritableDatabase();
78                         db.execSQL("delete from biodata where nama='"+selection+"'");
79                         RefreshList();
80                         break;
81                 }
82             }
83         });

84         builder.create().show();
85     });
86     ((ArrayAdapter)ListView01.getAdapter()).notifyDataSetChanged();
87 }
88 }

```

5. Kita akan membuat 3 file Empty Activity baru dengan beberapa nama Layout seperti berikut :

1. activity_buat_biodata.xml
2. activity_lihat_biodata.xml
3. activity_update_biodata.xml

Kemudian dengan nama activity :

1. BuatBiodata.java
2. LihatBiodata.java
3. UpdateBiodata.java

Setelah semua sudah dibuat kita akan membuat layout pada masing-masing layout xml yang sudah kita persiapkan.

6. Buka file `activity_buat_biodata.xml` dan tambahkan source code seperti berikut.

```
activity_buat_biodata.xml x
1  <?xml version="1.0" encoding="utf-8"?>
2  <RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      xmlns:app="http://schemas.android.com/apk/res-auto"
4      xmlns:tools="http://schemas.android.com/tools"
5      android:layout_width="match_parent"
6      android:layout_height="match_parent"
7      android:paddingLeft="16dp"
8      android:paddingRight="16dp"
9      android:paddingBottom="16dp"
10     android:paddingTop="16dp"
11     tools:context=".BuatBiodata">
12
13     <EditText
14         android:id="@+id/editText1"
15         android:layout_width="match_parent"
16         android:layout_height="wrap_content"
17         android:layout_alignLeft="@id/textView1"
18         android:layout_below="@id/textView1"
19         android:inputType="number"
20         android:maxLength="10">
21         <requestFocus/>
22     </EditText>
23
24     <TextView
25         android:id="@+id/textView1"
26         android:layout_width="wrap_content"
27         android:layout_height="wrap_content"
28         android:layout_alignParentLeft="true"
29         android:layout_alignParentTop="true"
30         android:text="Nomor" />
31     <TextView
32         android:id="@+id/textView2"
33         android:layout_width="wrap_content"
34         android:layout_height="wrap_content"
35         android:layout_alignLeft="@id/editText1"
36         android:layout_below="@id/editText1"
37         android:layout_marginTop="10dp"
38         android:text="Nama" />
39     <EditText
40         android:id="@+id/editText2"
41         android:layout_width="match_parent"
42         android:layout_height="wrap_content"
43         android:layout_alignLeft="@id/textView2"
44         android:layout_below="@id/textView2"
45         android:inputType="text"
46         android:maxLength="20" />
47     <TextView
48         android:id="@+id/textView3"
49         android:layout_width="wrap_content"
```

```

50         android:layout_height="wrap_content"
51         android:layout_alignLeft="@id/editText2"
52         android:layout_below="@id/editText2"
53         android:layout_marginTop="10dp"
54         android:text="Tanggal Lahir"/>
55     <EditText
56         android:id="@+id/editText3"
57         android:layout_width="match_parent"
58         android:layout_height="wrap_content"
59         android:layout_alignLeft="@id/textView3"
60         android:layout_below="@id/textView3"
61         android:inputType="date"/>
62     <TextView
63         android:id="@+id/textView4"
64         android:layout_width="wrap_content"
65         android:layout_height="wrap_content"
66         android:layout_alignLeft="@id/editText3"
67         android:layout_below="@id/editText3"
68         android:layout_marginTop="10dp"
69         android:text="Jenis Kelamin"/>
70     <EditText

```

```

71         android:id="@+id/editText4"
72         android:layout_width="match_parent"
73         android:layout_height="wrap_content"
74         android:layout_alignLeft="@id/textView4"
75         android:layout_below="@id/textView4"
76         android:inputType="text"
77         android:maxLength="1"
78         android:hint="L atau P"/>
79     <TextView
80         android:id="@+id/textView5"
81         android:layout_width="wrap_content"
82         android:layout_height="wrap_content"
83         android:layout_alignLeft="@id/editText4"
84         android:layout_below="@id/editText4"
85         android:layout_marginTop="10dp"
86         android:text="Alamat"/>
87     <EditText
88         android:id="@+id/editText5"
89         android:layout_width="match_parent"
90         android:layout_height="wrap_content"
91         android:layout_alignLeft="@id/textView5"
92         android:layout_below="@id/textView5"
93         android:maxLength="100"
94         android:inputType="text"/>

```

```

95     <Button
96         android:id="@+id/button1"
97         android:layout_width="wrap_content"
98         android:layout_height="wrap_content"
99         android:layout_alignLeft="@id/editText5"
100        android:layout_alignParentBottom="true"
101        style="?android:attr/borderlessButtonStyle"
102        android:drawableLeft="@drawable/ic_baseline_done_24"
103        android:textColor="@color/black"
104        android:text="Simpan"/>
105    <Button
106        android:id="@id/button2"
107        android:layout_width="wrap_content"
108        android:layout_height="wrap_content"
109        android:textColor="@color/black"
110        android:text="Kembali"
111        style="?android:attr/borderlessButtonStyle"
112        android:drawableLeft="@drawable/ic_baseline_arrow_back_ios_24"
113        android:layout_alignParentBottom="true"
114        android:layout_alignRight="@id/editText5"
115        android:layout_alignEnd="@id/editText5"/>
116 </RelativeLayout>

```

7. Buka file `activity_lihat_biodata.xml` dan tambahkan source code seperti berikut.

```

activity_lihat_biodata.xml
1  <?xml version="1.0" encoding="utf-8"?>
2  <RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      xmlns:app="http://schemas.android.com/apk/res-auto"
4      xmlns:tools="http://schemas.android.com/tools"
5      android:layout_width="match_parent"
6      android:layout_height="match_parent"
7      android:paddingTop="16dp"
8      android:paddingLeft="16dp"
9      android:paddingRight="16dp"
10     android:paddingBottom="16dp"
11     tools:context=".lihatBiodata">
12     <TextView
13         android:id="@+id/TextView01"
14         android:layout_width="wrap_content"
15         android:layout_height="wrap_content"
16         android:text="Nomor"
17         android:layout_marginTop="20dp"/>
18     <TextView
19         android:id="@+id/TextView02"
20         android:layout_width="wrap_content"
21         android:layout_height="wrap_content"
22         android:text="Nama"
23         android:layout_below="@+id/TextView01"
24         android:layout_alignLeft="@id/TextView01"
25         android:layout_marginTop="20dp"/>
26     <TextView
27         android:id="@+id/TextView03"
28         android:layout_width="wrap_content"
29         android:layout_height="wrap_content"
30         android:text="Tanggal Lahir"
31         android:layout_below="@+id/TextView02"
32         android:layout_alignLeft="@id/TextView02"
33         android:layout_marginTop="20dp"/>

```

```

34 <TextView
35     android:id="@+id/TextView04"
36     android:layout_width="wrap_content"
37     android:layout_height="wrap_content"
38     android:text="Jenis Kelamin"
39     android:layout_below="@+id/TextView03"
40     android:layout_alignLeft="@id/TextView03"
41     android:layout_marginTop="20dp"/>
42 <TextView
43     android:id="@+id/TextView05"
44     android:layout_width="wrap_content"
45     android:layout_height="wrap_content"
46     android:text="Alamat"
47     android:layout_below="@+id/TextView04"
48     android:layout_alignLeft="@id/TextView04"
49     android:layout_marginTop="20dp"/>
50 <TextView
51     android:id="@+id/textView1"
52     android:layout_width="wrap_content"
53     android:layout_height="wrap_content"
54     android:layout_alignParentTop="true"
55     android:layout_alignParentRight="true"
56     android:text="TextView"
57     android:layout_marginRight="104dp"
58     android:layout_marginTop="20dp"/>

```

```

59 <TextView
60     android:id="@+id/textView2"
61     android:layout_width="wrap_content"
62     android:layout_height="wrap_content"
63     android:layout_below="@id/textView1"
64     android:layout_alignRight="@+id/textView1"
65     android:text="TextView"
66     android:layout_marginTop="20dp"/>
67 <TextView
68     android:id="@+id/textView3"
69     android:layout_width="wrap_content"
70     android:layout_height="wrap_content"
71     android:layout_below="@id/textView2"
72     android:layout_alignRight="@+id/textView2"
73     android:text="TextView"
74     android:layout_marginTop="20dp"/>
75 <TextView
76     android:id="@+id/textView4"
77     android:layout_width="wrap_content"
78     android:layout_height="wrap_content"
79     android:layout_below="@id/textView3"

```

```

80         android:layout_alignRight="@+id/textView3"
81         android:text="TextView"
82         android:layout_marginTop="20dp"/>
83     <TextView
84         android:id="@+id/textView5"
85         android:layout_width="wrap_content"
86         android:layout_height="wrap_content"
87         android:layout_below="@id/textView4"
88         android:layout_alignRight="@+id/textView4"
89         android:text="TextView"
90         android:layout_marginTop="20dp"/>
91     <Button
92         android:id="@+id/button1"
93         android:layout_width="wrap_content"
94         android:layout_height="wrap_content"
95         android:layout_alignLeft="@id/TextView05"
96         android:layout_below="@id/TextView05"
97         android:layout_marginTop="34dp"
98         android:text="Kembali"
99         android:textColor="@color/black"
100         style="?android:attr/borderlessButtonStyle"
101         android:drawableLeft="@drawable/ic_baseline_arrow_back_ios_24"/>
102
103 </RelativeLayout>

```

8. Buka file `activity_update_biodata.xml` dan tambahkan source code seperti berikut.

```

activity_update_biodata.xml x
1  <?xml version="1.0" encoding="utf-8"?>
2  <RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      xmlns:app="http://schemas.android.com/apk/res-auto"
4      xmlns:tools="http://schemas.android.com/tools"
5      android:layout_width="match_parent"
6      android:layout_height="match_parent"
7      android:paddingBottom="16dp"
8      android:paddingRight="16dp"
9      android:paddingTop="16dp"
10     android:paddingLeft="16dp"
11     tools:context=".UpdateBiodata">
12     <EditText
13         android:id="@+id/editText1"
14         android:layout_width="match_parent"
15         android:layout_height="wrap_content"
16         android:layout_alignLeft="@id/textView1"
17         android:layout_below="@id/textView1"
18         android:inputType="number"
19         android:maxLength="10">
20         <requestFocus/>
21     </EditText>
22     <TextView
23         android:id="@+id/textView1"
24         android:layout_width="wrap_content"
25         android:layout_height="wrap_content"

```

```

26         android:layout_alignParentLeft="true"
27         android:layout_alignParentTop="true"
28         android:text="Nomor"/>
29     <TextView
30         android:id="@+id/textView2"
31         android:layout_width="wrap_content"
32         android:layout_height="wrap_content"
33         android:layout_alignLeft="@id/editText1"
34         android:layout_below="@id/editText1"
35         android:layout_marginTop="10dp"
36         android:text="Nama"/>
37     <EditText
38         android:id="@+id/editText2"
39         android:layout_width="match_parent"
40         android:layout_height="wrap_content"
41         android:layout_alignLeft="@id/textView2"
42         android:layout_below="@id/textView2"
43         android:inputType="text"
44         android:maxLength="20"/>
45     <TextView
46         android:id="@+id/textView3"
47         android:layout_width="wrap_content"
48         android:layout_height="wrap_content"
49         android:layout_alignLeft="@id/editText2"

```

```

50         android:layout_below="@id/editText2"
51         android:layout_marginTop="10dp"
52         android:text="Tanggal Lahir"/>
53     <EditText
54         android:id="@+id/editText3"
55         android:layout_width="match_parent"
56         android:layout_height="wrap_content"
57         android:layout_alignLeft="@id/textView3"
58         android:layout_below="@id/textView3"
59         android:inputType="date"/>
60     <TextView
61         android:id="@+id/textView4"
62         android:layout_width="wrap_content"
63         android:layout_height="wrap_content"
64         android:layout_alignLeft="@id/editText3"
65         android:layout_below="@id/editText3"
66         android:layout_marginTop="10dp"
67         android:text="Jenis Kelamin"/>
68     <EditText
69         android:id="@+id/editText4"
70         android:layout_width="match_parent"
71         android:layout_height="wrap_content"
72         android:layout_alignLeft="@id/textView4"
73         android:layout_below="@id/textView4"

```

```

74         android:inputType="text"
75         android:maxLength="1"
76         android:hint="L atau P"/>
77     <TextView
78         android:id="@+id/textView5"
79         android:layout_width="wrap_content"
80         android:layout_height="wrap_content"
81         android:layout_alignLeft="@id/editText4"
82         android:layout_below="@id/editText4"
83         android:layout_marginTop="10dp"
84         android:text="Alamat"/>
85     <EditText

```

```

86         android:id="@+id/editText5"
87         android:layout_width="match_parent"
88         android:layout_height="wrap_content"
89         android:layout_alignLeft="@id/textView5"
90         android:layout_below="@id/textView5"
91         android:maxLength="100"
92         android:inputType="text"/>
93     <Button
94         android:id="@+id/button1"
95         android:layout_width="wrap_content"
96         android:layout_height="wrap_content"
97         android:layout_alignLeft="@id/textView5"
98         android:layout_alignParentBottom="true"
99         style="?android:attr/borderlessButtonStyle"
100        android:drawableLeft="@drawable/ic_baseline_done_24"
101        android:textColor="@color/black"
102        android:text="Update"/>
103    <Button
104        android:id="@+id/button2"
105        android:layout_width="wrap_content"
106        android:layout_height="wrap_content"
107        android:textColor="@color/black"
108        android:text="Kembali"
109        style="?android:attr/borderlessButtonStyle"
110        android:drawableLeft="@drawable/ic_baseline_arrow_back_ios_24"
111        android:layout_alignParentBottom="true"
112        android:layout_alignRight="@id/editText5"
113        android:layout_alignEnd="@id/editText5"/>
114 </RelativeLayout>

```

9. Tuliskan source code java class di bawah ini dengan nama masing-masing class java. Yang pertama kita akan menambahkan pada file BuatBiodata.java

```

activity_update_biodata.xml x BuatBiodata.java x
1 package com.example.minggu7_sqlite;
2
3 import androidx.appcompat.app.AppCompatActivity;
4 import android.database.Cursor;
5 import android.database.sqlite.SQLiteDatabase;
6 import android.os.Bundle;
7 import android.view.View;
8 import android.widget.Button;
9 import android.widget.EditText;
10 import android.widget.Toast;
11
12 public class BuatBiodata extends AppCompatActivity {
13     protected Cursor cursor;
14     DataHelper dbHelper;
15     Button ton1, ton2;
16     EditText text1, text2, text3, text4, text5;
17     @Override
18     protected void onCreate(Bundle savedInstanceState) {
19         super.onCreate(savedInstanceState);
20         setContentView(R.layout.activity_buat_biodata);

```



```

21         dbHelper = new DataHelper( context: this);
22         text1 = (EditText) findViewById(R.id.editText1);
23         text2 = (EditText) findViewById(R.id.editText2);
24         text3 = (EditText) findViewById(R.id.editText3);
25         text4 = (EditText) findViewById(R.id.editText4);
26         text5 = (EditText) findViewById(R.id.editText5);
27         ton1 = (Button) findViewById(R.id.button1);
28         ton2 = (Button) findViewById(R.id.button2);
29
30         ton1.setOnClickListener(new View.OnClickListener() {
31             @Override
32             public void onClick(View arg0) {
33                 SQLiteDatabase db = dbHelper.getWritableDatabase();
34                 db.execSQL("insert into biodata(no, nama, tgl, jk, alamat) values(" +
35                     text1.getText().toString() + "," +
36                     text2.getText().toString() + "," +
37                     text3.getText().toString() + "," +
38                     text4.getText().toString() + "," +
39                     text5.getText().toString() + ")");
40                 Toast.makeText(getApplicationContext(), text: "Berhasil", Toast.LENGTH_SHORT).show();
41                 MainActivity.ma.RefreshList();
42                 finish();
43             }
44         });

```

```

45         ton2.setOnClickListener(new View.OnClickListener() {
46             @Override
47             public void onClick(View arg0) { finish(); }
48         });
49     }
50 }
51
52 }

```

10. Yang kedua kita akan menambahkan pada file LihatBiodata.java

```

1 package com.example.minggu7_sqlite;
2
3 import androidx.appcompat.app.AppCompatActivity;
4 import android.database.Cursor;
5 import android.database.sqlite.SQLiteDatabase;
6 import android.os.Bundle;
7 import android.view.View;
8 import android.widget.Button;
9 import android.widget.TextView;
10
11 public class LihatBiodata extends AppCompatActivity {
12     protected Cursor cursor;
13     DataHelper dbHelper;
14     Button ton2;
15     TextView text1, text2, text3, text4, text5;
16     @Override
17     protected void onCreate(Bundle savedInstanceState) {
18         super.onCreate(savedInstanceState);
19         setContentView(R.layout.activity_lihat_biodata);
20         dbHelper = new DataHelper( context: this);
21         text1 = (TextView) findViewById(R.id.textView1);
22         text2 = (TextView) findViewById(R.id.textView2);
23         text3 = (TextView) findViewById(R.id.textView3);
24         text4 = (TextView) findViewById(R.id.textView4);
25         text5 = (TextView) findViewById(R.id.textView5);
26         SQLiteDatabase db= dbHelper.getReadableDatabase();

```

```

27     cursor = db.rawQuery( sql: "SELECT * FROM biodata WHERE nama = '" +
28         getIntent().getStringExtra( name: "nama") + "'", selectionArgs: null);
29     cursor.moveToFirst();
30     if (cursor.getCount()>0)
31     {
32         cursor.moveToPosition(0);
33         text1.setText (cursor.getString( columnIndex: 0).toString());
34         text2.setText (cursor.getString( columnIndex: 1).toString());
35         text3.setText (cursor.getString( columnIndex: 2).toString());
36         text4.setText (cursor.getString( columnIndex: 3).toString());
37         text5.setText (cursor.getString( columnIndex: 4).toString());
38     }
39     ton2 = (Button) findViewById(R.id.button1);
40     ton2.setOnClickListener(new View.OnClickListener() {
41         @Override
42         public void onClick(View arg0) { finish(); }
43     });
44 }
45
46
47

```

11. Yang ketiga kita akan menambahkan pada file UpdateBiodata.java

```

activity_update_biodata.xml × UpdateBiodata.java ×
1     package com.example.minggu7_sqlite;
2
3     import androidx.appcompat.app.AppCompatActivity;
4     import android.database.Cursor;
5     import android.database.sqlite.SQLiteDatabase;
6     import android.os.Bundle;
7     import android.view.View;
8     import android.widget.Button;
9     import android.widget.EditText;
10    import android.widget.Toast;
11
12    public class UpdateBiodata extends AppCompatActivity {
13        protected Cursor cursor;
14        DataHelper dbHelper;
15        Button ton1, ton2;
16        EditText text1, text2, text3, text4, text5;
17
18        @Override
19        protected void onCreate(Bundle savedInstanceState) {
20            super.onCreate(savedInstanceState);
21            setContentView(R.layout.activity_update_biodata);
22            dbHelper = new DataHelper( context: this);
23            text1 = (EditText) findViewById(R.id.editText1);
24            text2 = (EditText) findViewById(R.id.editText2);
25            text3 = (EditText) findViewById(R.id.editText3);
26            text4 = (EditText) findViewById(R.id.editText4);
27            text5 = (EditText) findViewById(R.id.editText5);
28
29            SQLiteDatabase db = dbHelper.getReadableDatabase();
30            cursor = db.rawQuery( sql: "SELECT * FROM biodata WHERE nama = '" +
31                getIntent().getStringExtra( name: "nama") + "'", selectionArgs: null);
32            cursor.moveToFirst();
33            if (cursor.getCount() > 0) {
34                cursor.moveToPosition(0);

```

```

34         text1.setText(cursor.getString( columnIndex: 0).toString());
35         text2.setText(cursor.getString( columnIndex: 1).toString());
36         text3.setText(cursor.getString( columnIndex: 2).toString());
37         text4.setText(cursor.getString( columnIndex: 3).toString());
38         text5.setText(cursor.getString( columnIndex: 4).toString());
39     }
40     ton1 = (Button) findViewById(R.id.button1);
41     ton2 = (Button) findViewById(R.id.button2);
42     ton1.setOnClickListener(new View.OnClickListener() {
43         @Override
44         public void onClick(View arg0) {
45             SQLiteDatabase db = dbHelper.getWritableDatabase();
46             db.execSQL("update biodata set nama=" +
47                 text2.getText().toString() + ", tgl=" +
48                 text3.getText().toString() + ", jk=" +
49                 text4.getText().toString() + ", alamat=" +
50                 text5.getText().toString() + " where no=" +
51                 text1.getText().toString() + "");
52             Toast.makeText(getApplicationContext(), text: "Berhasil", Toast.LENGTH_LONG).show();
53             MainActivity.ma.RefreshList();
54             finish();
55         }
56     });
57     ton2.setOnClickListener(new View.OnClickListener() {
58         @Override
59         public void onClick(View arg0) { finish(); }
60     });
61 }
62 }
63 }
64 }
65 }

```

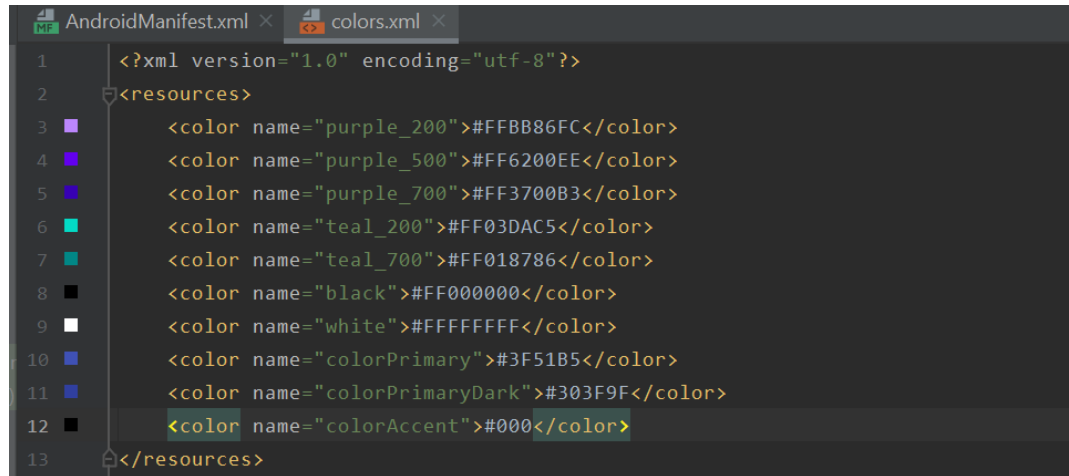
12. Buka file AndroidManifest.xml untuk menambahkan code seperti berikut.

```

AndroidManifest.xml
1 <?xml version="1.0" encoding="utf-8"?>
2 <manifest xmlns:android="http://schemas.android.com/apk/res/android"
3     package="com.example.minggu7_sqlite">
4
5     <application
6         android:allowBackup="true"
7         android:icon="@mipmap/ic_launcher"
8         android:label="@string/app_name"
9         android:roundIcon="@mipmap/ic_launcher_round"
10        android:supportRtl="true"
11        android:theme="@style/Theme.Minggu7_SQLite">
12        <activity android:name=".UpdateBiodata" android:label="Form Biodata Baru"></activity>
13        <activity android:name=".LihatBiodata" android:label="Lihat Biodata"></activity>
14        <activity android:name=".BuatBiodata" android:label="Update Biodata"></activity>
15        <activity android:name=".MainActivity">
16            <intent-filter>
17                <action android:name="android.intent.action.MAIN" />
18
19                <category android:name="android.intent.category.LAUNCHER" />
20            </intent-filter>
21        </activity>
22    </application>
23 </manifest>

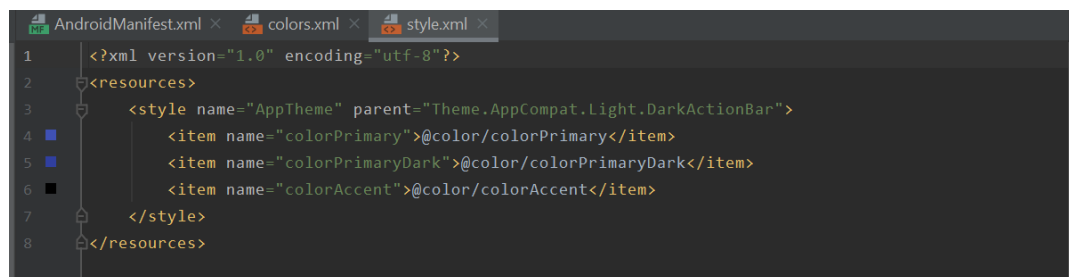
```

13. Edit res-values-color.xml



```
<?xml version="1.0" encoding="utf-8"?>
<resources>
  <color name="purple_200">#FFBB86FC</color>
  <color name="purple_500">#FF6200EE</color>
  <color name="purple_700">#FF3700B3</color>
  <color name="teal_200">#FF03DAC5</color>
  <color name="teal_700">#FF018786</color>
  <color name="black">#FF000000</color>
  <color name="white">#FFFFFFFF</color>
  <color name="colorPrimary">#3F51B5</color>
  <color name="colorPrimaryDark">#303F9F</color>
  <color name="colorAccent">#000</color>
</resources>
```

14. Selanjutnya pada file style.xml juga kita edit



```
<?xml version="1.0" encoding="utf-8"?>
<resources>
  <style name="AppTheme" parent="Theme.AppCompat.Light.DarkActionBar">
    <item name="colorPrimary">@color/colorPrimary</item>
    <item name="colorPrimaryDark">@color/colorPrimaryDark</item>
    <item name="colorAccent">@color/colorAccent</item>
  </style>
</resources>
```

15. Coba jalankan program yang sudah dibuat, maka tampilannya akan sebagai berikut.

