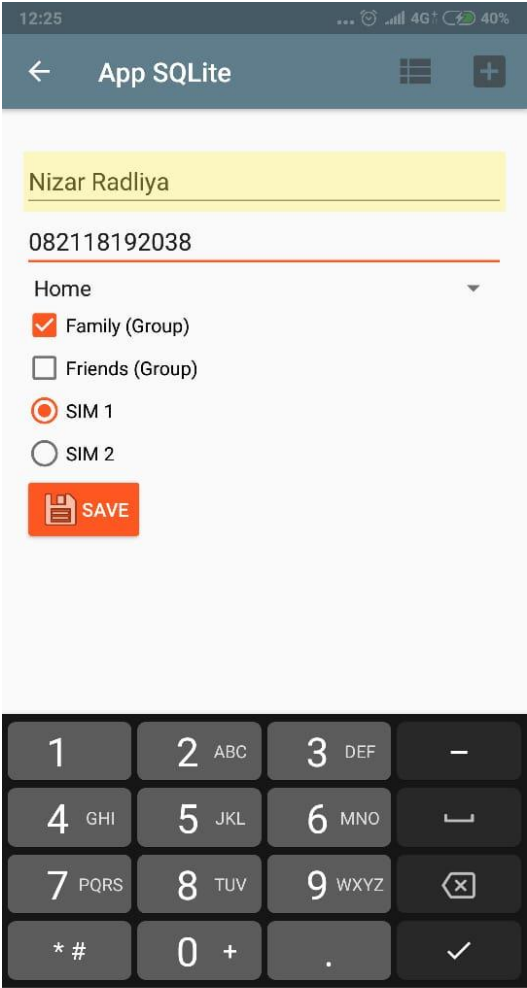
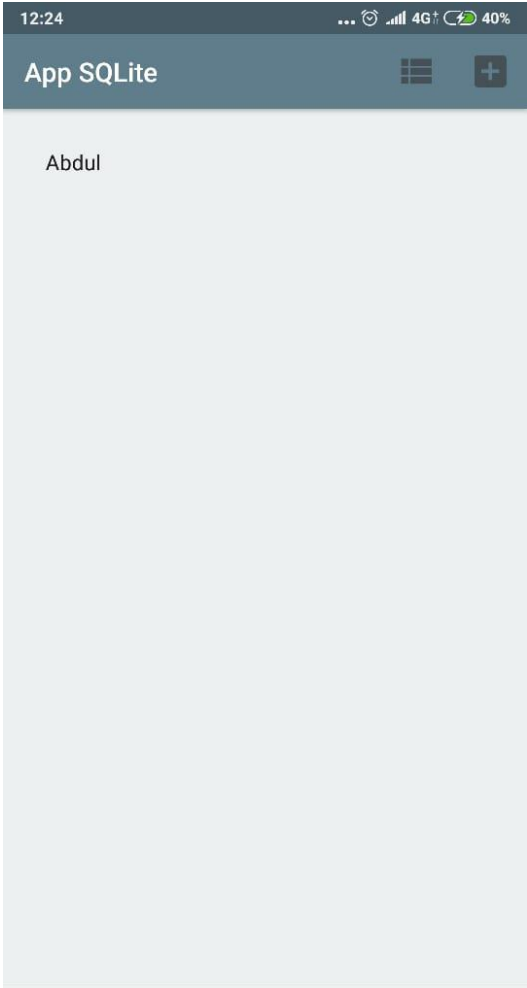
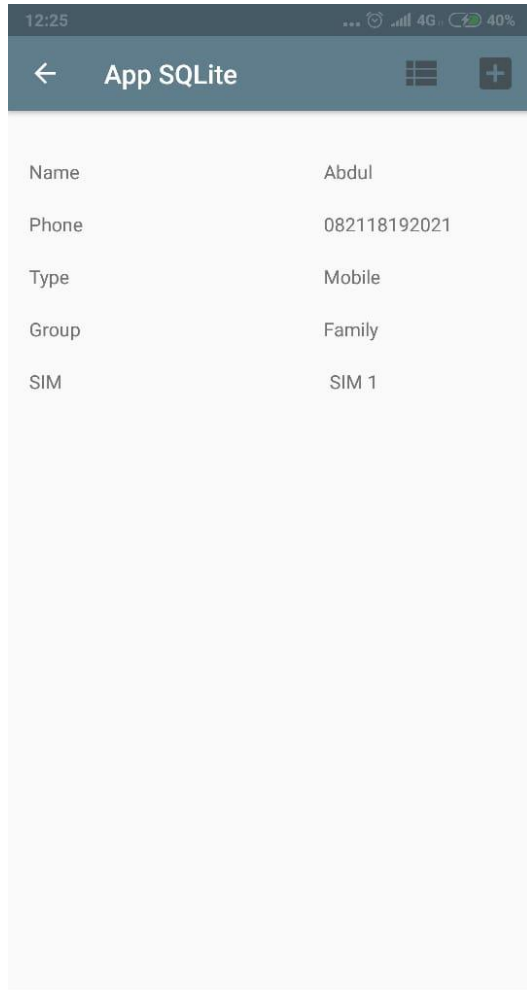
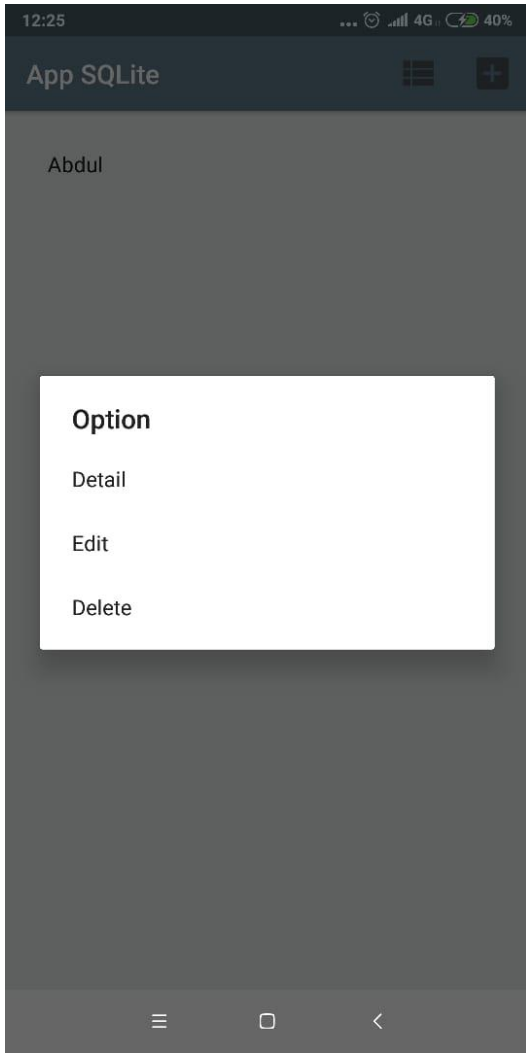


Praktikum 5 – SQLite





res/menu/menu_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:tools="http://schemas.android.com/tools"
      xmlns:android="http://schemas.android.com/apk/res/android"
      xmlns:app="http://schemas.android.com/apk/res-auto">
    <item
        android:id="@+id/action_read"
        android:icon="@drawable/ic_input_get"
        android:title="@string/list"
        app:showAsAction="ifRoom" />
    <item
        android:id="@+id/action_create"
        android:icon="@drawable/ic_input_add"
        android:title="@string/add"
        app:showAsAction="ifRoom" />
</menu>
```

res/values/colors.xml

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <color name="colorPrimary">#607D8B</color>
    <color name="colorPrimaryDark">#455A64</color>
    <color name="colorAccent">#FF5722</color>
    <color name="colorSubTitle">#757575</color>
</resources>
```

res/values/styles.xml

```
<resources>

    <!-- Base application theme. -->
    <style name="AppTheme" parent="Base.Theme.AppCompat.Light.DarkActionBar">
        <!-- Customize your theme here. -->
        <item name="colorPrimary">@color/colorPrimary</item>
        <item name="colorPrimaryDark">@color/colorPrimaryDark</item>
        <item name="colorAccent">@color/colorAccent</item>
    </style>

    <style name="ButtonGeneral" parent="@style/Widget.AppCompat.Button.Colored">
    </style>

</resources>
```

res/values/dimens.xml

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

res/values/strings.xml

```
<resources>
    <string name="app_name">App SQLite</string>
    <string name="action_settings">Settings</string>
    <string name="title_activity_detail">Detail</string>
    <string name="title_activity_create">Add</string>
    <string name="title_activity_updatebiodata">Memperbarui Biodata</string>

    <string-array name="labels_array">
        <item>Home</item>
        <item>Work</item>
        <item>Mobile</item>
        <item>Other</item>
    </string-array>

    <string name="spinner_work">Home</string>
```

```
<string name="hint_name">Name</string>
<string name="hint_phonenumber">Phone number</string>
<string name="label_friends">Friends (Group)</string>
<string name="label_family">Family (Group)</string>
<string name="label_sim1">SIM 1</string>
<string name="label_sim2">SIM 2</string>
<string name="show_button"> Save</string>
<string name="nothing_selected">"onNothingSelected: "</string>
<string name="list">List</string>
<string name="add">Add</string>
</resources>
```

res/layout/activity_main.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"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    android:background="#ecf0f1"
    tools:context=".MainActivity" >
    <ListView
        android:id="@+id/listView1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true">
    </ListView>
</RelativeLayout>
```

MainActivity.java

```
package com.example.nizar.appsqlite;

import android.content.DialogInterface;
import android.content.Intent;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.support.v7.app.AlertDialog;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
import android.widget.AdapterView;
import android.widget.AdapterView.OnItemClickListener;
import android.widget.ArrayAdapter;
import android.widget.ListView;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

    String[] daftar, name;
    ListView listView01;
    protected Cursor cursor;
    DataHelper dbcenter;
    public static MainActivity ma;

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

        ma = this;
        dbcenter = new DataHelper(this);
        RefreshList();
    }

    public void RefreshList() {
        SQLiteDatabase db = dbcenter.getReadableDatabase();
        cursor = db.rawQuery("SELECT * FROM contact", null);
        daftar = new String[cursor.getCount()];
        name = new String[cursor.getCount()];
        cursor.moveToFirst();
        for (int cc=0; cc < cursor.getCount(); cc++){
            cursor.moveToPosition(cc);
            daftar[cc] = cursor.getString(0).toString();
            name[cc] = cursor.getString(1).toString();
        }
    }
}
```

```

        ListView01 = (ListView)findViewById(R.id.listView1);
        ListView01.setAdapter(new ArrayAdapter(this,
android.R.layout.simple_list_item_1, name));
        ListView01.setSelected(true);
        ListView01.setOnClickListener(new AdapterView.OnItemClickListener() {
            public void onItemClick(AdapterView arg0, View arg1, int arg2, long
arg3) {
                final String selection = daftar[arg2];
                //getItemAtPosition(arg2).toString();
                final CharSequence[] dialogitem = {"DetailActivity", "Edit",
Delete};
                AlertDialog.Builder builder = new
AlertDialog.Builder(MainActivity.this);
                builder.setTitle("Option");
                builder.setItems(dialogitem, new DialogInterface.OnClickListener()
{
                    public void onClick(DialogInterface dialog, int item) {
                        switch(item){
                            case 0 :
                                Intent i = new Intent(getApplicationContext(),
DetailActivity.class);
                                i.putExtra("id_contact", selection);
                                startActivity(i);
                                break;
                            case 1 :
                                Toast.makeText(getApplicationContext(), "Silakan
coba buat " +
                                    "sendiri!", Toast.LENGTH_LONG).show();
                                break;
                            case 2 :
                                SQLiteDatabase db = dbcenter.getWritableDatabase();
                                db.execSQL("DELETE FROM contact WHERE id_contact =
"
                                    +selection+"");
                                RefreshList();
                                break;
                        }
                    }
                });
                builder.create().show();
            });
            ((ArrayAdapter)ListView01.getAdapter()).notifyDataSetChanged();
        }
    }

    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        getMenuInflater().inflate(R.menu.menu_main, menu);
        return true;
    }

    @Override
    public boolean onOptionsItemSelected(MenuItem item) {
        int id = item.getItemId();
        if (id == R.id.action_read) {
            Intent iread = new Intent(this, MainActivity.class);
            startActivity(iread);
            return true;
        } else if (id == R.id.action_create) {
            Intent icreate = new Intent(this, CreateActivity.class);
            startActivity(icreate);
            return true;
        }
        return super.onOptionsItemSelected(item);
    }
}

```

DataHelper.java

```
package com.example.nizar.appsqlite;

import android.content.Context;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;
import android.util.Log;

public class DataHelper extends SQLiteOpenHelper {

    private static final String DATABASE_NAME = "contacts.db";
    private static final int DATABASE_VERSION = 1;
    public DataHelper(Context context) {
        super(context, DATABASE_NAME, null, DATABASE_VERSION);
        // TODO Auto-generated constructor stub
    }

    @Override
    public void onCreate(SQLiteDatabase db) {
        // TODO Auto-generated method stub
        String sql = "CREATE TABLE IF NOT EXISTS contact" +
            "(id_contact INTEGER PRIMARY KEY AUTOINCREMENT, " +
            "name TEXT, " +
            "phone TEXT, " +
            "type TEXT NULL, " +
            "groups TEXT NULL, " +
            "sim TEXT NULL);";
        Log.d("Data", "onCreate: " + sql);
        db.execSQL(sql);
        sql = "INSERT INTO contact (name, phone, type, groups, sim) " +
            "VALUES ('Abdul', '082118192021', 'Mobile', 'Family', 'SIM 1');";
        db.execSQL(sql);
    }

    @Override
    public void onUpgrade(SQLiteDatabase arg0, int arg1, int arg2) {
        // TODO Auto-generated method stub
    }
}
```

res/layout/activity_create.xml

```
<?xml version="1.0" encoding="utf-8"?>
<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"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=". CreateActivity">

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:layout_marginTop="@dimen/activity_vertical_margin"
        android:orientation="vertical"
        android:id="@+id/linearLayout1">

        <EditText
            android:id="@+id/editText_name"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:inputType="textPersonName"
            android:hint="@string/hint_name" />

        <EditText
            android:id="@+id/editText_phone"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:inputType="phone"
            android:hint="@string/hint_phonenumber" />

        <Spinner
            android:id="@+id/label_spinner"
            android:layout_width="match_parent"
            android:layout_height="wrap_content">
        </Spinner>

        <CheckBox
            android:id="@+id/cb_family"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="@string/label_family" />

        <CheckBox
            android:id="@+id/cb_friends"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="@string/label_friends" />

        <RadioGroup
            android:id="@+id/rgSim"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:orientation="vertical">
            <RadioButton
                android:id="@+id/rg1"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:text="@string/label_sim1" />

            <RadioButton
                android:id="@+id/rg2"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:text="@string/label_sim2" />
        </RadioGroup>
    </LinearLayout>
</RelativeLayout>
```



```

        <Button
            style="@style/ButtonGeneral"
            android:id="@+id/button_main"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:onClick="add"
            android:text="@string/show_button"
            android:drawableLeft="@android:drawable/ic_menu_save"/>

    </LinearLayout>

</RelativeLayout>

```

CreateActivity.java

```

package com.example.nizar.appsqllite;

import android.content.Intent;
import android.database.sqlite.SQLiteDatabase;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.util.Log;
import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
import android.widget.AdapterView;
import android.widget.AdapterView.OnItemClickListener;
import android.widget.ArrayAdapter;
import android.widget.CheckBox;
import android.widget.EditText;
import android.widget.RadioGroup;
import android.widget.Spinner;
import android.widget.Toast;

public class CreateActivity extends AppCompatActivity implements
    AdapterView.OnItemClickListener {
    DataHelper dbHelper;
    // Define TAG for logging.
    private static final String TAG = MainActivity.class.getSimpleName();

    // Define mSpinnerLabel for the label (the spinner item that the user chooses).
    private String mSpinnerLabel = "";

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

        // CreateActivity the spinner.
        Spinner spinner = (Spinner) findViewById(R.id.label_spinner);
        if (spinner != null) {
            spinner.setOnItemClickListener(this);
        }

        // CreateActivity ArrayAdapter using the string array and default spinner
        layout.
        ArrayAdapter<CharSequence> adapter = ArrayAdapter.createFromResource(this,
            R.array.labels_array, android.R.layout.simple_spinner_item);

        // Specify the layout to use when the list of choices appears.
        adapter.setDropDownViewResource
            (android.R.layout.simple_spinner_dropdown_item);

        // Apply the adapter to the spinner.
        if (spinner != null) {
            spinner.setAdapter(adapter);
        }
    }
}

```

```

public void add(View view) {
    dbHelper = new DataHelper(this);

    EditText etName      = (EditText) findViewById(R.id.editText_name);
    EditText etPhone     = (EditText) findViewById(R.id.editText_phone);
    CheckBox cbFamily    = (CheckBox) findViewById(R.id.cb_family);
    CheckBox cbFriends   = (CheckBox) findViewById(R.id.cb_friends);
    RadioGroup rgSim     = (RadioGroup) findViewById(R.id.rgSim);

    if ((etName != null) && (etPhone != null)) {
        StringBuffer group = new StringBuffer();
        if (cbFamily.isChecked()) {
            group.append("Family ");
        }
        if (cbFriends.isChecked()) {
            group.append("Friends");
        }
    }

    String sim = new String();
    switch (rgSim.getCheckedRadioButtonId()) {
        case R.id.rg1:
            sim = "SIM 1";
            break;
        case R.id.rg2:
            sim = "SIM 2";
            break;
    }

    SQLiteDatabase db = dbHelper.getWritableDatabase();
    db.execSQL("INSERT INTO contact(name, phone, type, groups, sim)
VALUES('" +
        etName.getText().toString() + "','" +
        etPhone.getText().toString() + "','" +
        mSpinnerLabel + "','" +
        group.toString() + "','" +
        sim + "')");
    Toast.makeText(getApplicationContext(), "Success",
Toast.LENGTH_LONG).show();
    }
    MainActivity.ma.RefreshList();
    finish();
}

@Override
public void onItemClick(AdapterView<?> adapterView, View view, int pos, long
id) {
    mSpinnerLabel = adapterView.getItemAtPosition(pos).toString();
}

@Override
public void onNothingSelected(AdapterView<?> adapterView) {
    Log.i(TAG, getString(R.string.nothing_selected));
}

@Override
public boolean onCreateOptionsMenu(Menu menu) {
    // Inflate the menu; this adds items to the action bar if it is present.
    getMenuInflater().inflate(R.menu.menu_main, menu);
    return true;
}

@Override
public boolean onOptionsItemSelected(MenuItem item) {
    int id = item.getItemId();
    if (id == R.id.action_read) {
        Intent iread = new Intent(this, MainActivity.class);
        startActivity(iread);
    }
}

```

```
        return true;
    } else if (id == R.id.action_create) {
        Intent icreate = new Intent(this, CreateActivity.class);
        startActivity(icreate);
        return true;
    }
    return super.onOptionsItemSelected(item);
}
}
```

res/layout/activity_detail.xml

```
<?xml version="1.0" encoding="utf-8"?>
<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"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    tools:context=". DetailActivity" >

    <TextView
        android:id="@+id/textView1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentRight="true"
        android:layout_alignParentTop="true"
        android:layout_marginRight="104dp"
        android:layout_marginTop="20dp"
        android:text="TextView" />

    <TextView
        android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignLeft="@+id/textView1"
        android:layout_below="@+id/textView1"
        android:layout_marginTop="20dp"
        android:text="TextView" />

    <TextView
        android:id="@+id/textView3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignLeft="@+id/textView2"
        android:layout_below="@+id/textView2"
        android:layout_marginTop="20dp"
        android:text="TextView" />

    <TextView
        android:id="@+id/textView4"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignLeft="@+id/textView3"
        android:layout_below="@+id/textView3"
        android:layout_marginTop="20dp"
        android:text="TextView" />

    <TextView
        android:id="@+id/textView5"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignRight="@+id/textView4"
        android:layout_below="@+id/textView4"
        android:layout_marginTop="20dp"
        android:text="TextView" />

    <TextView
        android:id="@+id/TextView05"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignBaseline="@+id/textView5"
        android:layout_alignBottom="@+id/textView5"
        android:layout_alignLeft="@+id/TextView03"
        android:text="SIM" />

    <TextView
```

```

        android:id="@+id/TextView03"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignBaseline="@+id/textView4"
        android:layout_alignBottom="@+id/textView4"
        android:layout_alignLeft="@+id/TextView04"
        android:text="Group" />

<TextView
    android:id="@+id/TextView04"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignBaseline="@+id/textView3"
    android:layout_alignBottom="@+id/textView3"
    android:layout_alignLeft="@+id/TextView02"
    android:text="Type" />

<TextView
    android:id="@+id/TextView02"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignBaseline="@+id/textView2"
    android:layout_alignBottom="@+id/textView2"
    android:layout_alignLeft="@+id/TextView01"
    android:text="Phone" />

<TextView
    android:id="@+id/TextView01"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_above="@+id/textView2"
    android:layout_alignParentLeft="true"
    android:text="Name" />

</RelativeLayout>

```

DetailActivity.java

```
package com.example.nizar.appsqlite;
```

```

import android.content.Intent;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuItem;
import android.widget.TextView;

public class DetailActivity extends AppCompatActivity {
    protected Cursor cursor;
    DataHelper dbHelper;
    TextView text1, text2, text3, text4, text5;

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

        dbHelper = new DataHelper(this);
        text1 = (TextView) findViewById(R.id.textView1);
        text2 = (TextView) findViewById(R.id.textView2);
        text3 = (TextView) findViewById(R.id.textView3);
        text4 = (TextView) findViewById(R.id.textView4);
        text5 = (TextView) findViewById(R.id.textView5);
        SQLiteDatabase db = dbHelper.getReadableDatabase();
        cursor = db.rawQuery("SELECT * FROM contact WHERE id_contact = " +
            getIntent().getStringExtra("id_contact") + "", null);
    }
}

```

```

        cursor.moveToFirst();
        if (cursor.getCount()>0)
        {
            cursor.moveToPosition(0);
            text1.setText(cursor.getString(1).toString());
            text2.setText(cursor.getString(2).toString());
            text3.setText(cursor.getString(3).toString());
            text4.setText(cursor.getString(4).toString());
            text5.setText(cursor.getString(5).toString());
        }
    }

    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        // Inflate the menu; this adds items to the action bar if it is present.
        getMenuInflater().inflate(R.menu.menu_main, menu);
        return true;
    }

    @Override
    public boolean onOptionsItemSelected(MenuItem item) {
        int id = item.getItemId();
        if (id == R.id.action_read) {
            Intent iread = new Intent(this, MainActivity.class);
            startActivity(iread);
            return true;
        } else if (id == R.id.action_create) {
            Intent icreate = new Intent(this, CreateActivity.class);
            startActivity(icreate);
            return true;
        }
        return super.onOptionsItemSelected(item);
    }
}
}

```