*<?***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:id="@+id/activity\_main"**

**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=".MainActivity"**>

<**EditText**

**android:id="@+id/editRollno"**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"**

**android:hint="Rollno"** />

<**EditText**

**android:id="@+id/editName"**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"**

**android:layout\_below="@+id/editRollno"**

**android:hint="Name"** />

<**EditText**

**android:id="@+id/editMarks"**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"**

**android:layout\_below="@+id/editName"**

**android:hint ="marks"** />

<**Button**

**android:id="@+id/btnAdd"**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"**

**android:layout\_below="@+id/editMarks"**

**android:layout\_marginTop="10dp"**

**android:text="Add"** />

<**Button**

**android:id="@+id/btnDelete"**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"**

**android:layout\_below="@+id/btnAdd"**

**android:layout\_marginTop="15dp"**

**android:text="Delete"** />

<**Button**

**android:id="@+id/btnModify"**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"**

**android:layout\_below="@+id/btnDelete"**

**android:layout\_marginTop="20dp"**

**android:text="modify"** />

<**Button**

**android:id="@+id/btnViewAll"**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"**

**android:layout\_below="@+id/btnModify"**

**android:layout\_marginTop="25dp"**

**android:text="viewall"** />

<**Button**

**android:id="@+id/btnView"**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"**

**android:layout\_below="@+id/btnViewAll"**

**android:layout\_marginTop="30dp"**

**android:text="view"** />

<**Button**

**android:id="@+id/btnShowInfo"**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"**

**android:layout\_below="@+id/btnView"**

**android:layout\_marginTop="35dp"**

**android:text="showinfo"** />

</**RelativeLayout**>

MainActivity.java

**package** com.example.jevitha.a22\_sqllitedatabase\_connectivity;

**import** android.content.Context;

**import** android.database.Cursor;

**import** android.database.sqlite.SQLiteDatabase;

**import** android.os.Bundle;

**import** android.support.v7.app.AlertDialog;

**import** android.support.v7.app.AppCompatActivity;

**import** android.view.View;

**import** android.widget.Button;

**import** android.widget.EditText;

**public class** MainActivity **extends** AppCompatActivity **implements** View.OnClickListener {

EditText **editRollno**, **editName**, **editMarks**;

Button **btnAdd**, **btnDelete**, **btnModify**, **btnViewAll**, **btnShowInfo**, **btnView**;

SQLiteDatabase **db**;

@Override

**protected void** onCreate(Bundle savedInstanceState) {

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

**editRollno** = (EditText) findViewById(R.id.***editRollno***);

**editName** = (EditText) findViewById(R.id.***editName***);

**editMarks** = (EditText) findViewById(R.id.***editMarks***);

**btnAdd** = (Button) findViewById(R.id.***btnAdd***);

**btnDelete** = (Button) findViewById(R.id.***btnDelete***);

**btnModify** = (Button) findViewById(R.id.***btnModify***);

**btnView** = (Button) findViewById(R.id.***btnView***);

**btnViewAll** = (Button) findViewById(R.id.***btnViewAll***);

**btnShowInfo** = (Button) findViewById(R.id.***btnShowInfo***);

*//Registering Event Handlers*

**btnAdd**.setOnClickListener(**this**);

**btnDelete**.setOnClickListener(**this**);

**btnModify**.setOnClickListener(**this**);

**btnView**.setOnClickListener(**this**);

**btnViewAll**.setOnClickListener(**this**);

**btnShowInfo**.setOnClickListener(**this**);

*// Creating database and table*

**db** = openOrCreateDatabase(**"StudentDB"**, Context.***MODE\_PRIVATE***, **null**);

**db**.execSQL(**"CREATE TABLE IF NOT EXISTS student(rollno VARCHAR,name VARCHAR,marks VARCHAR);"**);

}

@Override

**public void** onClick(View view) {

*// Adding a record*

**if** (view == **btnAdd**) {

*// Checking empty fields*

**if** (**editRollno**.getText().toString().trim().length() == 0 || **editName**.getText().toString().trim().length() == 0 ||

**editMarks**.getText().toString().trim().length() == 0) {

showMessage(**"Error"**, **"Please enter all values"**);

**return**;

}

*// Inserting record*

**db**.execSQL(**"INSERT INTO student VALUES('"** + **editRollno**.getText() + **"','"** + **editName**.getText() +

**"','"** + **editMarks**.getText() + **"');"**);

showMessage(**"Success"**, **"Record added"**);

clearText();

}

*// Deleting a record*

**if** (view == **btnDelete**) {

*// Checking empty roll number*

**if** (**editRollno**.getText().toString().trim().length() == 0) {

showMessage(**"Error"**, **"Please enter Rollno"**);

**return**;

}

*// Searching roll number*

Cursor c = **db**.rawQuery(**"SELECT \* FROM student WHERE rollno='"** + **editRollno**.getText() + **"'"**, **null**);

**if** (c.moveToFirst()) {

*// Deleting record if found*

showMessage(**"Success"**, **"Record Deleted"**);

**db**.execSQL(**"DELETE FROM student WHERE rollno='"** + **editRollno**.getText() + **"'"**);

} **else** {

showMessage(**"Error"**, **"Invalid Rollno"**);

}

clearText();

}

*// Modifying a record*

**if** (view == **btnModify**) {

*// Checking empty roll number*

**if** (**editRollno**.getText().toString().trim().length() == 0) {

showMessage(**"Error"**, **"Please enter Rollno"**);

**return**;

}

*// Searching roll number*

Cursor c = **db**.rawQuery(**"SELECT \* FROM student WHERE rollno='"** + **editRollno**.getText() + **"'"**, **null**);

**if** (c.moveToFirst()) {

*// Modifying record if found*

**db**.execSQL(**"UPDATE student SET name='"** + **editName**.getText() + **"',marks='"** + **editMarks**.getText() +

**"' WHERE rollno='"** + **editRollno**.getText() + **"'"**);

showMessage(**"Success"**, **"Record Modified"**);

}

**else** {

showMessage(**"Error"**, **"Invalid Rollno"**);

}

clearText();

}

*// Viewing a record*

**if** (view == **btnView**) {

*// Checking empty roll number*

**if** (**editRollno**.getText().toString().trim().length() == 0) {

showMessage(**"Error"**, **"Please enter Rollno"**);

**return**;

}

*// Searching roll number*

Cursor c = **db**.rawQuery(**"SELECT \* FROM student WHERE rollno='"** + **editRollno**.getText() + **"'"**, **null**);

**if** (c.moveToFirst()) {

*// Displaying record if found*

**editName**.setText(c.getString(1));

**editMarks**.setText(c.getString(2));

} **else** {

showMessage(**"Error"**, **"Invalid Rollno"**);

clearText();

}

}

*// Viewing all records*

**if** (view == **btnViewAll**) {

*// Retrieving all records*

Cursor c = **db**.rawQuery(**"SELECT \* FROM student"**, **null**);

*// Checking if no records found*

**if** (c.getCount() == 0) {

showMessage(**"Error"**, **"No records found"**);

**return**;

}

*// Appending records to a string buffer*

StringBuffer buffer = **new** StringBuffer();

**while** (c.moveToNext())

{

buffer.append(**"Rollno: "** + c.getString(0) + **"\n"**);

buffer.append(**"Name: "** + c.getString(1) + **"\n"**);

buffer.append(**"Marks: "** + c.getString(2) + **"\n\n"**);

}

*// Displaying all records*

showMessage(**"Student Details"**, buffer.toString());

}

*// Displaying info*

**if** (view == **btnShowInfo**){

showMessage(**"SQLite demo"**, **"SQLite Connectivity"**);

}

}

**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();

}

**public void** clearText(){

**editRollno**.setText(**""**);

**editName**.setText(**""**);

**editMarks**.setText(**""**);

**editRollno**.requestFocus();

}

}