**Ex-5 Develop an application that makes use of Database (SQLite)**

**MainActivity.java**

package com.example.ex\_5;

import android.content.Context;

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.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

EditText e1, e2;

Button b1, b2,b3,b4,b5;

SQLiteDatabase db;

String n, p;

Cursor c,data;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

e1 = (EditText)findViewById(R.id.editTextTextPersonName);

e2 = (EditText)findViewById(R.id.editTextTextPersonName2);

b1 = (Button)findViewById(R.id.button);

b2 = (Button) findViewById(R.id.button2);

b3=(Button)findViewById(R.id.button3);

b4=(Button)findViewById(R.id.button4);

b5=(Button)findViewById(R.id.button5);

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

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

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

data = db.rawQuery("SELECT \* FROM nametb;",null);

b1.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

db.execSQL("INSERT INTO nametb VALUES ('" + e1.getText().toString() + "','" + e2.getText().toString() + "')");

Toast.makeText(MainActivity.this, "Insert Success", Toast.LENGTH\_SHORT).show();

}

});

b2.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

c.moveToFirst();

n=c.getString(0);

p=c.getString(1);

Intent i= new Intent(getApplicationContext(),MainActivity2.class);

Bundle bun=new Bundle();

bun.putString("na",n);

bun.putString("pl",p);

i.putExtras(bun);

startActivity(i);

}

});

b3.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

c.moveToNext();

n=c.getString(0);

p=c.getString(1);

Intent i= new Intent(getApplicationContext(),MainActivity2.class);

Bundle bun=new Bundle();

bun.putString("na",n);

bun.putString("pl",p);

i.putExtras(bun);

startActivity(i);

}

});

b4.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

if (data.getCount() == 0) {

showDialogWithDbData("Error", "No data found");

} else {

// String appending

StringBuilder stringBuilder = new StringBuilder();

while (data.moveToNext()) {

stringBuilder.append("Rollno: ").append(data.getString(0)).append("\n");

stringBuilder.append("Name: ").append(data.getString(1)).append("\n");

}

// Show all data in Alert Dialog

showDialogWithDbData("Data", stringBuilder.toString());

}

}

});

b5.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

db.execSQL("DELETE FROM nametb WHERE name='" + e2.getText()+"';");

Toast.makeText(MainActivity.this, "DELETE Success", Toast.LENGTH\_SHORT).show();

}

});

}

public void showDialogWithDbData(String title, String message) {

AlertDialog.Builder builder = new AlertDialog.Builder(this);

builder.setCancelable(true);

builder.setTitle(title);

builder.setMessage(message);

builder.show(); }

}

**activity\_main.xml**

<?xml version="1.0" encoding="utf-8"?>

<android.support.constraint.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:app="http://schemas.android.com/apk/res-auto"

xmlns:tools="http://schemas.android.com/tools"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity">

<LinearLayout

android:layout\_width="409dp"

android:layout\_height="729dp"

android:orientation="vertical"

tools:layout\_editor\_absoluteX="1dp"

tools:layout\_editor\_absoluteY="1dp">

<EditText

android:id="@+id/editTextTextPersonName"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:ems="10"

android:inputType="textPersonName"

android:text="Roll" />

<EditText

android:id="@+id/editTextTextPersonName2"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:ems="10"

android:inputType="textPersonName"

android:text="Name" />

<Button

android:id="@+id/button"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="Insert" />

<Button

android:id="@+id/button2"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="view previous record" />

<Button

android:id="@+id/button3"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="view next record" />

<Button

android:id="@+id/button4"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="view all" />

<Button

android:id="@+id/button5"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="delete" />

</LinearLayout>

</android.support.constraint.ConstraintLayout>

**MainActivity2.java**

package com.example.ex\_5;

import android.annotation.SuppressLint;

import android.support.v7.app.AppCompatActivity;

import android.os.Bundle;

import android.widget.TextView;

public class MainActivity2 extends AppCompatActivity {

TextView t1,t2;

@SuppressLint("MissingInflatedId")

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main2);

t1=(TextView)findViewById(R.id.textView);

t2=(TextView)findViewById(R.id.textView2);

Bundle b =getIntent().getExtras();

t1.setText(b.getString("na"));

t2.setText(b.getString("pl"));

}

}

**activity\_main2.xml**

<?xml version="1.0" encoding="utf-8"?>

<android.support.constraint.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:app="http://schemas.android.com/apk/res-auto"

xmlns:tools="http://schemas.android.com/tools"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity2">

<LinearLayout

android:layout\_width="409dp"

android:layout\_height="729dp"

android:orientation="vertical"

tools:layout\_editor\_absoluteX="1dp"

tools:layout\_editor\_absoluteY="1dp">

<TextView

android:id="@+id/textView"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="TextView" />

<TextView

android:id="@+id/textView2"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="TextView" />

</LinearLayout>

</android.support.constraint.ConstraintLayout>

**Output:**



