**PR-23**

**23 Perform Database operation using SQLiteDatabase class.**

**XML Code**

<?xml version="1.0" encoding="utf-8"?>  
<androidx.constraintlayout.widget.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">  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="36dp"  
 android:text="Student Info Registration"  
 android:textColor="#6200EE"  
 android:textSize="24sp"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent" />  
  
 <EditText  
 android:id="@+id/name"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:hint="Enter Name"  
 android:inputType="textPersonName"  
 app:layout\_constraintTop\_toBottomOf="@id/textView"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 android:layout\_margin="16dp" />  
  
 <EditText  
 android:id="@+id/email"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:hint="Enter Email"  
 android:inputType="textEmailAddress"  
 app:layout\_constraintTop\_toBottomOf="@id/name"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 android:layout\_margin="16dp" />  
  
 <EditText  
 android:id="@+id/phone"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:hint="Enter Phone Number"  
 android:inputType="phone"  
 app:layout\_constraintTop\_toBottomOf="@id/email"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 android:layout\_margin="16dp" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:text="Insert Record"  
 app:layout\_constraintTop\_toBottomOf="@id/phone"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 android:layout\_margin="16dp" />  
  
 <Button  
 android:id="@+id/reset"  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:text="Reset"  
 app:layout\_constraintTop\_toBottomOf="@id/button"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 android:layout\_margin="16dp" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**Java Code**

package com.example.pr23\_sqlitedatabase;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.ContentValues;  
import android.database.Cursor;  
import android.database.SQLException;  
import android.database.sqlite.SQLiteDatabase;  
import android.os.Bundle;  
import android.util.Log;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;  
  
public class MainActivity extends AppCompatActivity {  
  
 Button b1, reset;  
 EditText name, email, Phoneno;  
 SQLiteDatabase sd;  
 Cursor c;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 b1 = findViewById(R.id.*button*);  
 reset = findViewById(R.id.*reset*);  
 name = findViewById(R.id.*name*);  
 email = findViewById(R.id.*email*);  
 Phoneno = findViewById(R.id.*phone*);  
  
 try {  
 // Open or create database  
 sd = openOrCreateDatabase("StudentInfo", *MODE\_PRIVATE*, null);  
  
 // Create table  
 sd.execSQL("CREATE TABLE IF NOT EXISTS stud\_contacts(name TEXT, email TEXT, phoneno TEXT)");  
  
 } catch (SQLException se) {  
 Log.*d*("DatabaseCreation Error", "Error Msg: " + se);  
 }  
  
 // Insert data  
 b1.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 ContentValues cv = new ContentValues();  
 cv.put("name", name.getText().toString());  
 cv.put("email", email.getText().toString());  
 cv.put("phoneno", Phoneno.getText().toString());  
  
 long result = sd.insert("stud\_contacts", null, cv);  
  
 if (result != -1) {  
 Toast.*makeText*(getApplicationContext(), "Record Inserted Successfully", Toast.*LENGTH\_LONG*).show();  
 } else {  
 Toast.*makeText*(getApplicationContext(), "Error in Inserting Record", Toast.*LENGTH\_LONG*).show();  
 }  
 }  
 });  
  
 // Reset fields  
 reset.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 name.setText("");  
 email.setText("");  
 Phoneno.setText("");  
 }  
 });  
 }  
  
 @Override  
 protected void onStop() {  
 super.onStop();  
 if (sd != null) sd.close();  
 }  
}