Activitymain.xml

*<?*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">  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginBottom="281dp"  
 android:text="Login"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent" />  
 <EditText  
 android:id="@+id/editTextTextPersonName"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="48dp"  
 android:layout\_marginTop="153dp"  
 android:ems="10"  
 android:inputType="textPersonName"  
 android:hint="User name"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
 <EditText  
 android:id="@+id/editTextTextPassword"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="48dp"  
 android:layout\_marginStart="3dp"  
 android:layout\_marginTop="50dp"  
 android:ems="10"  
 android:hint="Password"  
 app:layout\_constraintStart\_toStartOf="@+id/editTextTextPersonName" app:layout\_constraintTop\_toBottomOf="@+id/editTextTextPersonName" />  
 <Button  
 android:id="@+id/button2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="40dp"  
 android:text="Register"  
 app:layout\_constraintStart\_toStartOf="@+id/button"  
 app:layout\_constraintTop\_toBottomOf="@+id/button" />  
</androidx.constraintlayout.widget.ConstraintLayout>

‘app/src/main/res/layout/activity\_registration.xml’

*<?*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=".Registration">  
  
 <Button  
 android:id="@+id/button3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="100dp"  
 android:text="Register"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.696" />  
  
 <EditText  
 android:id="@+id/editTextTextPersonName2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="48dp"  
 android:ems="10"  
 android:hint="Username"  
 android:inputType="textPersonName"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.497"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.389" />  
  
 <EditText  
 android:id="@+id/editTextTextPassword2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="48dp"  
 android:ems="10"  
 android:hint="Password"  
 android:inputType="text"  
 app:layout\_constraintBottom\_toTopOf="@+id/button3"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.497"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.789" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

SQLiteHelper.java

package com.example.lab5;  
  
 import android.content.Context;  
 import android.database.sqlite.SQLiteDatabase;  
 import android.database.sqlite.SQLiteOpenHelper;  
 import android.database.sqlite.SQLiteStatement;  
 import androidx.annotation.Nullable;  
  
public class SQLiteHelper extends SQLiteOpenHelper {  
 public SQLiteHelper(@Nullable Context context, @Nullable String name, @Nullable SQLiteDatabase.CursorFactory factory, int version) {  
 super(context, name, factory, version);  
 }  
 public void insertData(String username,String password){  
 SQLiteDatabase database = this.getWritableDatabase();  
 String query = "insert into users values(?,?)";  
 SQLiteStatement statement = database.compileStatement(query);  
 statement.clearBindings();  
 statement.bindString(1,username);  
 statement.bindString(2,password);  
 statement.executeInsert();  
 statement.close();  
 database.close();  
  
 }  
 public void queryData(String sql){  
 SQLiteDatabase database = getWritableDatabase();  
 database.execSQL(sql);  
 }  
 @Override  
 public void onCreate(SQLiteDatabase sqLiteDatabase) {  
  
 }  
 @Override  
 public void onUpgrade(SQLiteDatabase sqLiteDatabase, int i, int i1) {  
 }  
  
}

mainactivity.java

package com.example.lab5;  
 import androidx.appcompat.app.AppCompatActivity;  
 import android.content.Intent;  
 import android.database.Cursor;  
 import android.database.sqlite.SQLiteDatabase;  
 import android.os.Bundle;  
 import android.view.View;  
 import android.widget.Button;  
 import android.widget.EditText;  
 import android.widget.Toast;  
  
 import com.example.lab5.SQLiteHelper;  
  
public class MainActivity extends AppCompatActivity {  
 private EditText e1,e2;  
 private Button logButton,registerButton;  
 private SQLiteHelper helper;  
 private SQLiteDatabase database;  
 private String username, password,tempPass;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 e1 = findViewById(R.id.*editTextTextPersonName*);  
 e2 = findViewById(R.id.*editTextTextPassword*);  
 logButton = findViewById(R.id.*button*);  
 registerButton = findViewById(R.id.*button2*);  
 helper = new SQLiteHelper(getBaseContext(),"userdb",null,1);  
 helper.queryData("create table if not exists users(username varchar,password varchar)");  
 logButton.setOnClickListener(new View.OnClickListener() { @Override  
 public void onClick(View view) {  
 username = e1.getText().toString();  
 password = e2.getText().toString();  
 try{helper = new SQLiteHelper(getBaseContext(),"userdb",null,1);  
 final String path =getApplicationContext().getDatabasePath("userdb").getPath(); database = SQLiteDatabase.*openOrCreateDatabase*(path,null);  
 Cursor cursor = database.rawQuery("select password from users where username=?",new String[] {username});  
  
 if(cursor.getCount() == 0){  
 Toast.*makeText*(MainActivity.this, "User not found", Toast.*LENGTH\_SHORT*).show();  
 }else{  
 while(cursor.moveToNext()){  
 tempPass = cursor.getString(0);  
 }  
 if(tempPass.equals(password)){  
 Toast.*makeText*(MainActivity.this, "Login Successful", Toast.*LENGTH\_SHORT*).show(); }else{Toast.*makeText*(MainActivity.this, "Incorrect Credential", Toast.*LENGTH\_SHORT*).show();}  
 }  
 }catch (Exception e){  
 System.*out*.println(e.toString());  
  
 }  
  
 }  
  
 });  
 registerButton.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 Intent i = new Intent(MainActivity.this,Registration.class);  
 startActivity(i);  
 }  
 });  
 }  
}

Registration.java

package com.example.lab5;  
  
import androidx.appcompat.app.AppCompatActivity;  
 import android.os.Bundle;  
 import android.view.View;  
 import android.widget.Button;  
 import android.widget.EditText;  
 import android.widget.Toast;  
public class Registration extends AppCompatActivity {  
 private EditText e1,e2;  
 private Button registerButton;  
 private String username,password;  
 private static SQLiteHelper *helper*;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_registration*);  
 e1 = findViewById(R.id.*editTextTextPersonName2*);  
 e2 = findViewById(R.id.*editTextTextPassword2*);  
 registerButton = findViewById(R.id.*button3*);  
 *helper* = new SQLiteHelper(getBaseContext(),"userdb",null,1);  
 registerButton.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 username = e1.getText().toString();  
 password = e2.getText().toString();  
 *helper*.insertData(username,password);  
 Toast.*makeText*(Registration.this, "Success", Toast.*LENGTH\_SHORT*).show();  
 }  
 });  
 }  
}