**Aim:-** Database Programming with SQLite.

**activity\_main.xml :-**

*<?*xml version="1.0" encoding="utf-8"*?>*<androidx.constraintlayout.widget.ConstraintLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
  
 <ImageView  
 android:id="@+id/imageView"  
 android:layout\_width="215dp"  
 android:layout\_height="197dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.093"  
 app:srcCompat="@drawable/iconlogin" />  
  
 <Button  
 android:id="@+id/btn1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="LOGIN"  
 android:textSize="35dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <Button  
 android:id="@+id/btn2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="SIGNUP"  
 android:textSize="30dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.657" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**activity\_login.xml :-**

<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=".login">  
  
 <TextView  
 android:id="@+id/textView2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Login"  
 android:textColor="@color/purple\_700"  
 android:textSize="55dp"  
 app:layout\_constraintBottom\_toTopOf="@+id/editTextTextPersonName2"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.516"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.252"  
 tools:ignore="MissingConstraints" />  
  
 <EditText  
 android:id="@+id/editTextTextPersonName2"  
 android:layout\_width="294dp"  
 android:layout\_height="67dp"  
 android:layout\_marginBottom="124dp"  
 android:ems="10"  
 android:inputType="textPersonName"  
 android:text="Name"  
 android:textSize="30dp"  
 app:layout\_constraintBottom\_toTopOf="@+id/editTextTextPassword3"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.521"  
 app:layout\_constraintStart\_toStartOf="parent"  
 tools:ignore="MissingConstraints" />  
  
 <EditText  
 android:id="@+id/editTextTextPassword3"  
 android:layout\_width="290dp"  
 android:layout\_height="63dp"  
 android:layout\_marginTop="520dp"  
 android:ems="10"  
 android:hint="Password"  
 android:inputType="textPassword"  
 android:textSize="30dp"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.537"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 tools:ignore="MissingConstraints" />  
  
 <Button  
 android:id="@+id/button2"  
 android:layout\_width="145dp"  
 android:layout\_height="74dp"  
 android:backgroundTint="@color/teal\_200"  
 android:text="Login"  
 android:textColor="@color/purple\_700"  
 android:textSize="30dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/editTextTextPassword3"  
 tools:ignore="MissingConstraints" />  
</androidx.constraintlayout.widget.ConstraintLayout>

**android\_signup.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=".Signupform">  
  
 <EditText  
 android:id="@+id/editTextTextPersonName"  
 android:layout\_width="241dp"  
 android:layout\_height="60dp"  
 android:ems="10"  
 android:inputType="textPersonName"  
 android:hint="Enter Username"  
 android:textSize="25dp"  
 app:layout\_constraintBottom\_toTopOf="@+id/editTextTextPassword"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.879"  
 tools:ignore="MissingConstraints" />  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="180dp"  
 android:layout\_height="60dp"  
 android:text="SIGNUP"  
 android:textSize="40dp"  
 android:textAlignment="center"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.141" />  
  
 <EditText  
 android:id="@+id/editTextTextPassword"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:inputType="textPassword"  
 android:hint="Enter Password"  
 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" />  
  
 <EditText  
 android:id="@+id/editTextTextPassword2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:inputType="textPassword"  
 android:hint="Confirm Password"  
 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="0.61" />  
  
 <Button  
 android:id="@+id/button3"  
 android:layout\_width="180dp"  
 android:layout\_height="76dp"  
 android:text="SIGNUP"  
 android:textSize="30dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/editTextTextPassword2" />  
</androidx.constraintlayout.widget.ConstraintLayout>

**activity\_success.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=".success">  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**DBHelper.kt :-**

package com.example.databaseconnectionlogin  
  
import android.content.ContentValues  
import android.content.Context  
import android.database.sqlite.SQLiteDatabase  
import android.database.sqlite.SQLiteOpenHelper  
  
  
class DBHelper(context: Context):SQLiteOpenHelper(context,"userdata",null,1){  
 override fun onCreate(p0: SQLiteDatabase?) {  
 p0?.execSQL("create table userdata (username TEXT primary key, password TEXT)")  
 }  
  
 override fun onUpgrade(p0: SQLiteDatabase?,p1: Int, p2: Int){  
 p0?.execSQL("drop table if exists userdata")  
 }  
  
 fun insertdata(username: String, password: String): Boolean {  
 val p0 = this.writableDatabase  
 val cv = ContentValues()  
 cv.put("username",username)  
 cv.put("password",password)  
 val result = p0.insert("userdata",null,cv)  
 if (result ==-1 .toLong()){  
 return false  
 }  
 return true  
 }  
  
 fun checkuserpass(username: String, password: String): Boolean {  
 val p0 = this.writableDatabase  
 val query = "select \* from userdata where username= '$username' and password='$password'"  
 val cursor = p0.rawQuery(query,null)  
 if(cursor.count<=0){  
 cursor.close()  
 return false  
 }  
 cursor.close()  
 return true  
 }  
  
  
}

**MainActivity.kt :-**

package com.example.databaseconnectionlogin  
  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import android.widget.Button;  
import android.content.Intent;  
import kotlinx.android.synthetic.main.activity\_main.\*  
  
  
  
class MainActivity : AppCompatActivity() {  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_main*)  
  
 btn2.setOnClickListener **{** val intent = Intent(this,Signupform :: class.*java*)  
 startActivity(intent)  
 **}** btn1.setOnClickListener **{** val intent = Intent(this,login :: class.*java*)  
 startActivity(intent)  
 **}** }  
  
}

**login.kt :-**

package com.example.databaseconnectionlogin  
  
import android.content.Intent  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import android.text.TextUtils  
import android.widget.Button  
import android.widget.EditText  
import android.widget.Toast  
  
class login : AppCompatActivity() {  
 private lateinit var loginbtn: Button  
 private lateinit var edituser: EditText  
 private lateinit var editpword: EditText  
 private lateinit var dbh: DBHelper  
  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_login*)  
  
 loginbtn = findViewById(R.id.*button2*)  
 edituser = findViewById(R.id.*editTextTextPersonName2*)  
 editpword = findViewById(R.id.*editTextTextPassword3*)  
 dbh = DBHelper(this)  
  
 loginbtn.setOnClickListener **{** val useredtx = edituser.*text*.toString()  
 val passedtx = editpword.*text*.toString()  
  
 if (TextUtils.isEmpty(useredtx) || TextUtils.isEmpty(passedtx)) {  
 Toast.makeText(this, "Add Username & Password", Toast.*LENGTH\_SHORT*).show()  
 } else {  
 val checkuser = dbh.checkuserpass(useredtx, passedtx)  
 if (checkuser == true) {  
 Toast.makeText(this, "Login Successful", Toast.*LENGTH\_SHORT*).show()  
 val intent = Intent(*applicationContext*, success::class.*java*)  
 startActivity(intent)  
 } else {  
 Toast.makeText(this, "Wrong Username & Password", Toast.*LENGTH\_SHORT*).show()  
 }  
 }  
 **}** }  
}

**signup.kt :-**

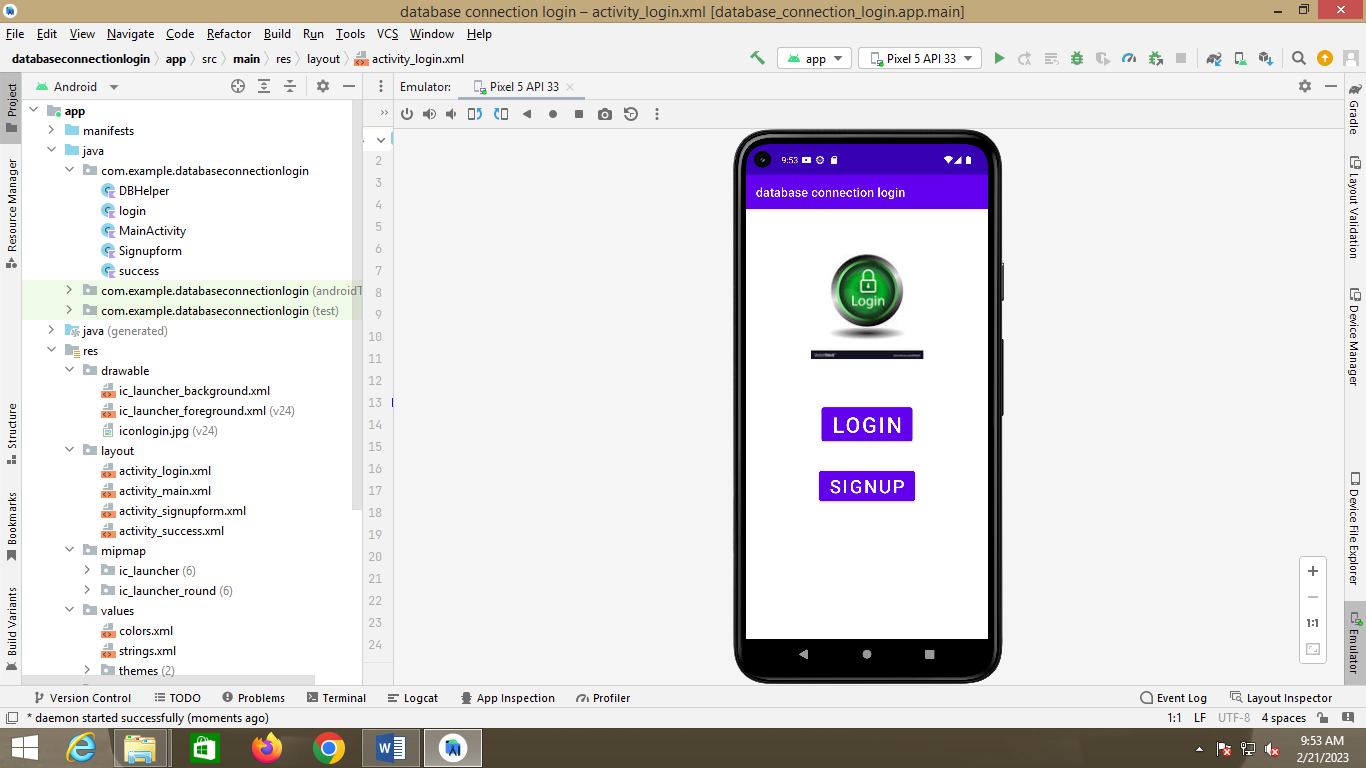
package com.example.databaseconnectionlogin  
  
import android.content.Intent  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import android.text.TextUtils  
import android.widget.Button  
import android.widget.EditText  
import android.widget.Toast  
  
class Signupform : AppCompatActivity() {  
  
 private lateinit var uname: EditText  
 private lateinit var pword: EditText  
 private lateinit var cpword: EditText  
 private lateinit var signupbtn: Button  
 private lateinit var dp: DBHelper  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_signupform*)  
  
 uname = findViewById(R.id.*editTextTextPersonName*)  
 pword = findViewById(R.id.*editTextTextPassword*)  
 cpword = findViewById(R.id.*editTextTextPassword2*)  
 signupbtn = findViewById(R.id.*button3*)  
 var db = DBHelper(this)  
  
 uname = findViewById(R.id.*editTextTextPersonName*)  
 pword = findViewById(R.id.*editTextTextPassword*)  
 cpword = findViewById(R.id.*editTextTextPassword2*)  
 signupbtn = findViewById(R.id.*button3*)  
 db = DBHelper(this)  
  
 signupbtn.setOnClickListener **{** val unametext = uname.*text*.toString()  
 val pwordtext = pword.*text*.toString()  
 val cpwordtext = cpword.*text*.toString()  
 val savedata = db.insertdata(unametext, pwordtext)  
  
 if (TextUtils.isEmpty(unametext) || TextUtils.isEmpty(pwordtext) || TextUtils.isEmpty(  
 cpwordtext  
 )  
 ) {  
 Toast.makeText(  
 this,  
 "Add Username, Password & Conform Password",  
 Toast.*LENGTH\_SHORT* ).show()  
 } else {  
 if (pwordtext.equals(cpwordtext)) {  
 if (savedata == true) {  
 Toast.makeText(this, "Signup successful", Toast.*LENGTH\_SHORT*).show()  
 val intent = Intent(*applicationContext*, login::class.*java*)  
 startActivity(intent)  
 } else {  
 Toast.makeText(this, "User Exists", Toast.*LENGTH\_SHORT*).show()  
 }  
 } else {  
 Toast.makeText(this, "Password Not Match", Toast.*LENGTH\_SHORT*).show()  
 }  
 }  
 **}** }  
}

**success.kt :-**

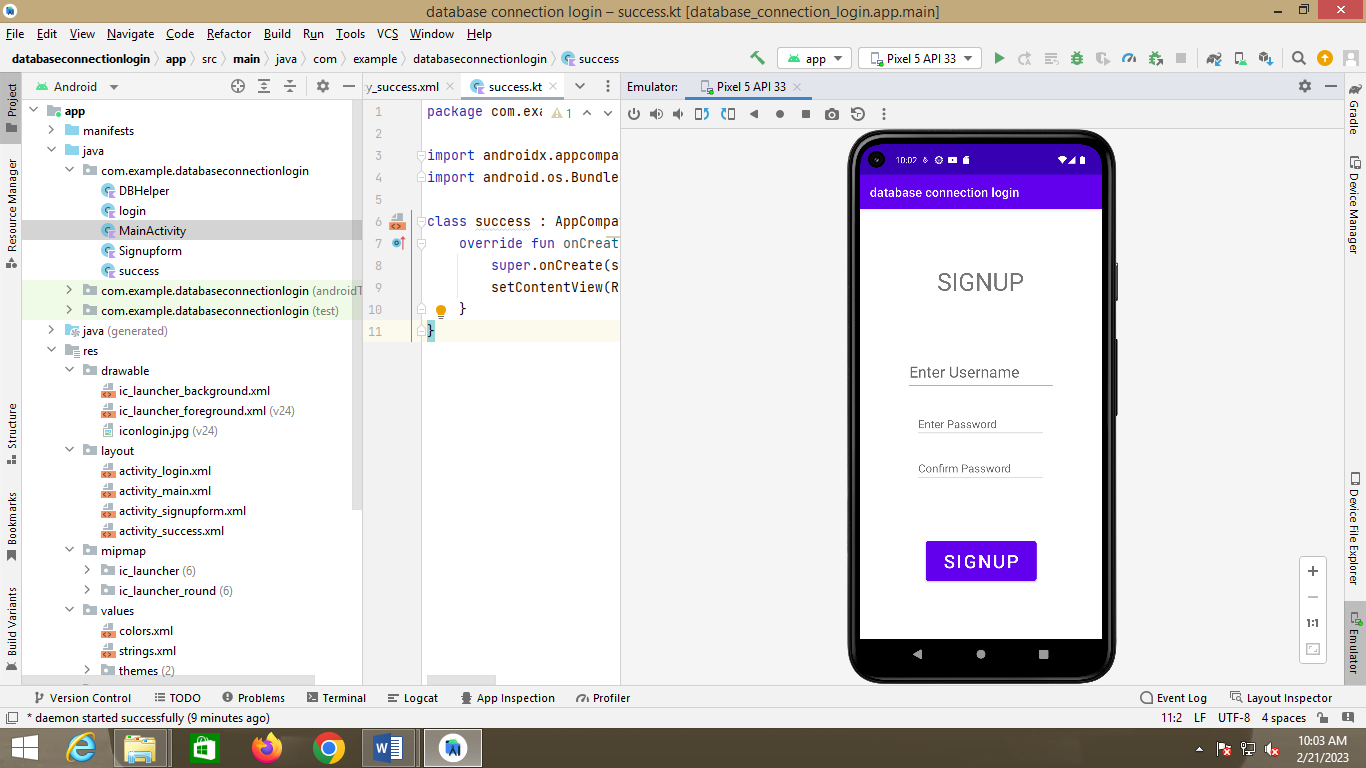
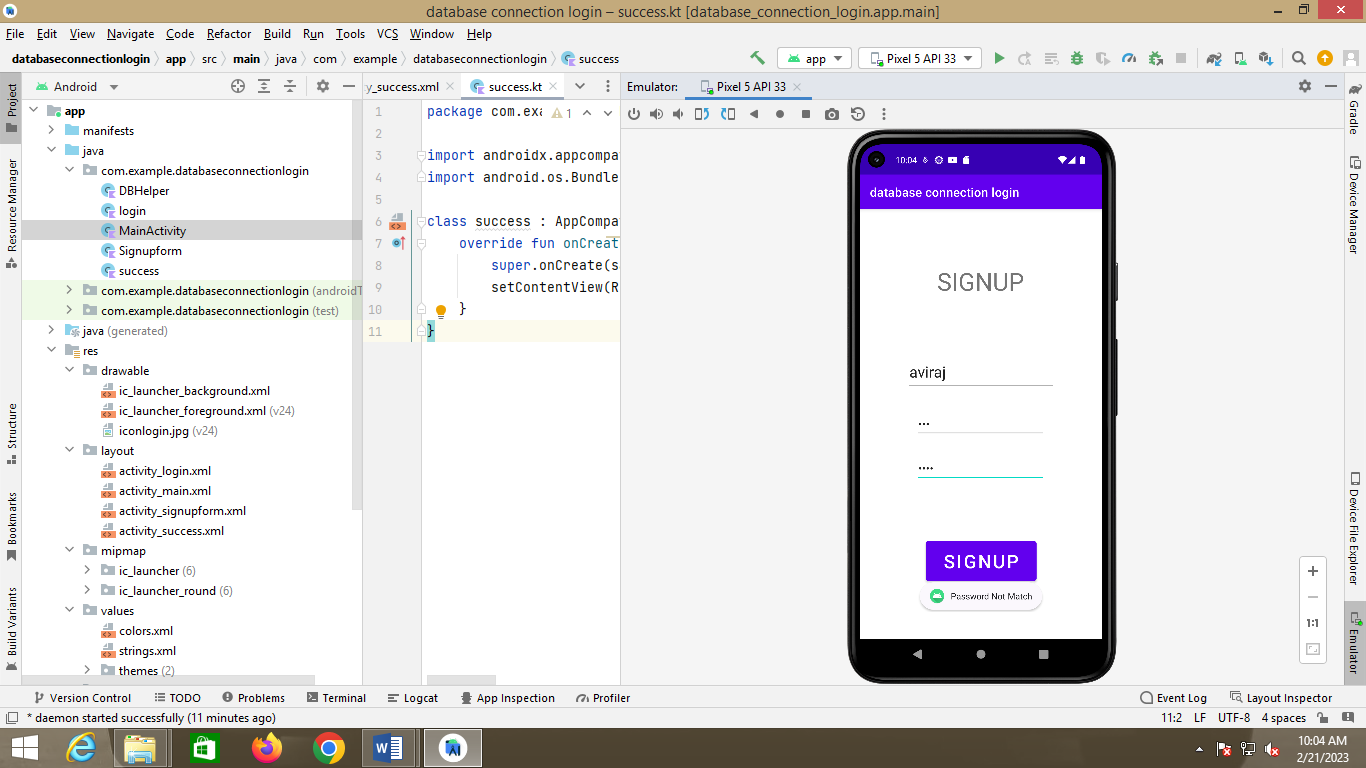
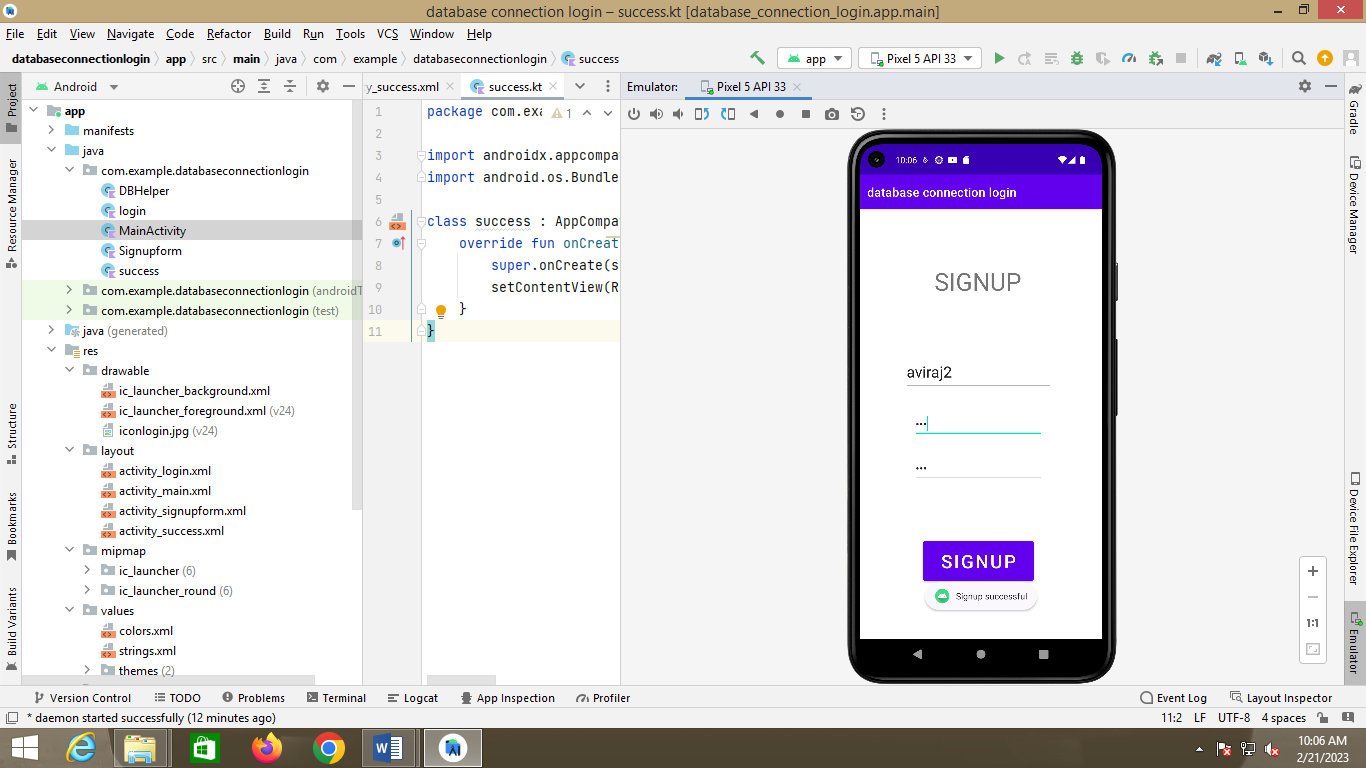
package com.example.databaseconnectionlogin  
  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
  
class success : AppCompatActivity() {  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_success*)  
 }  
}

**Output :-**

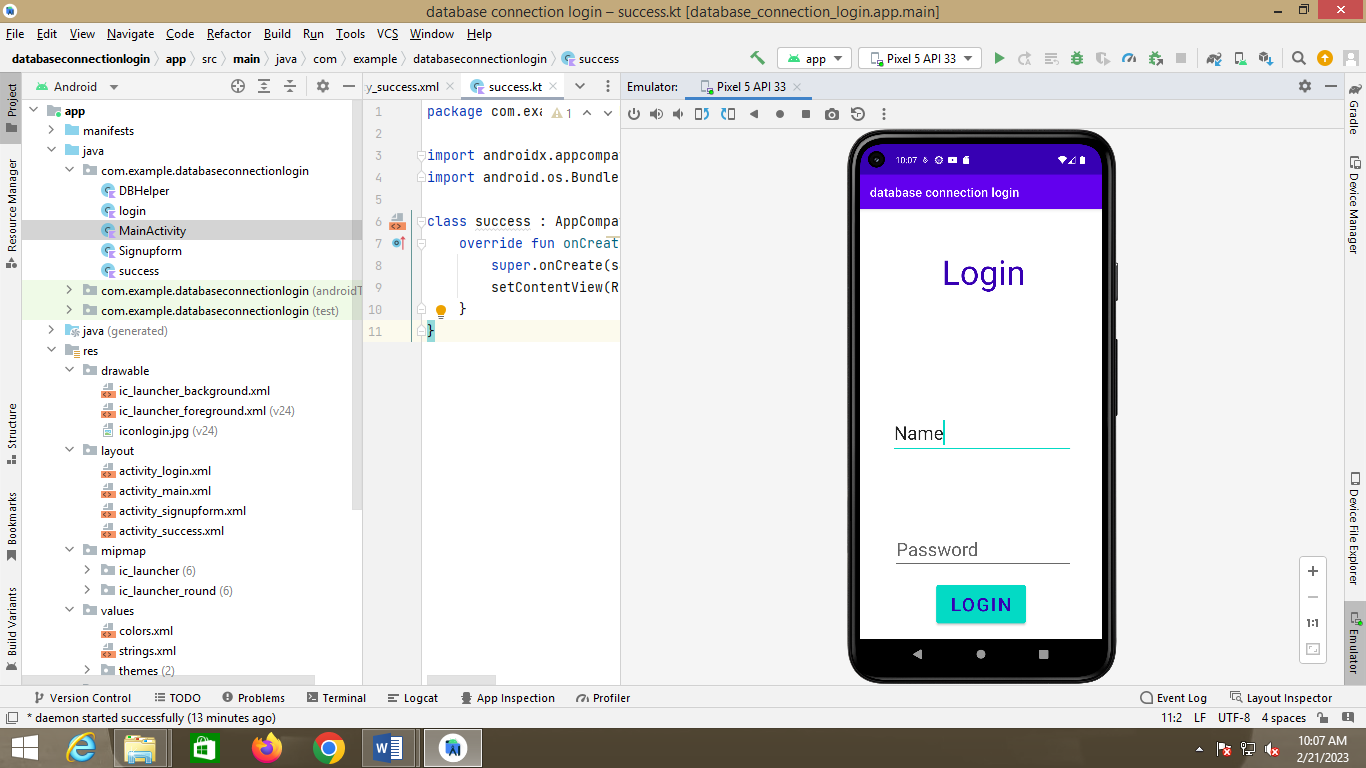
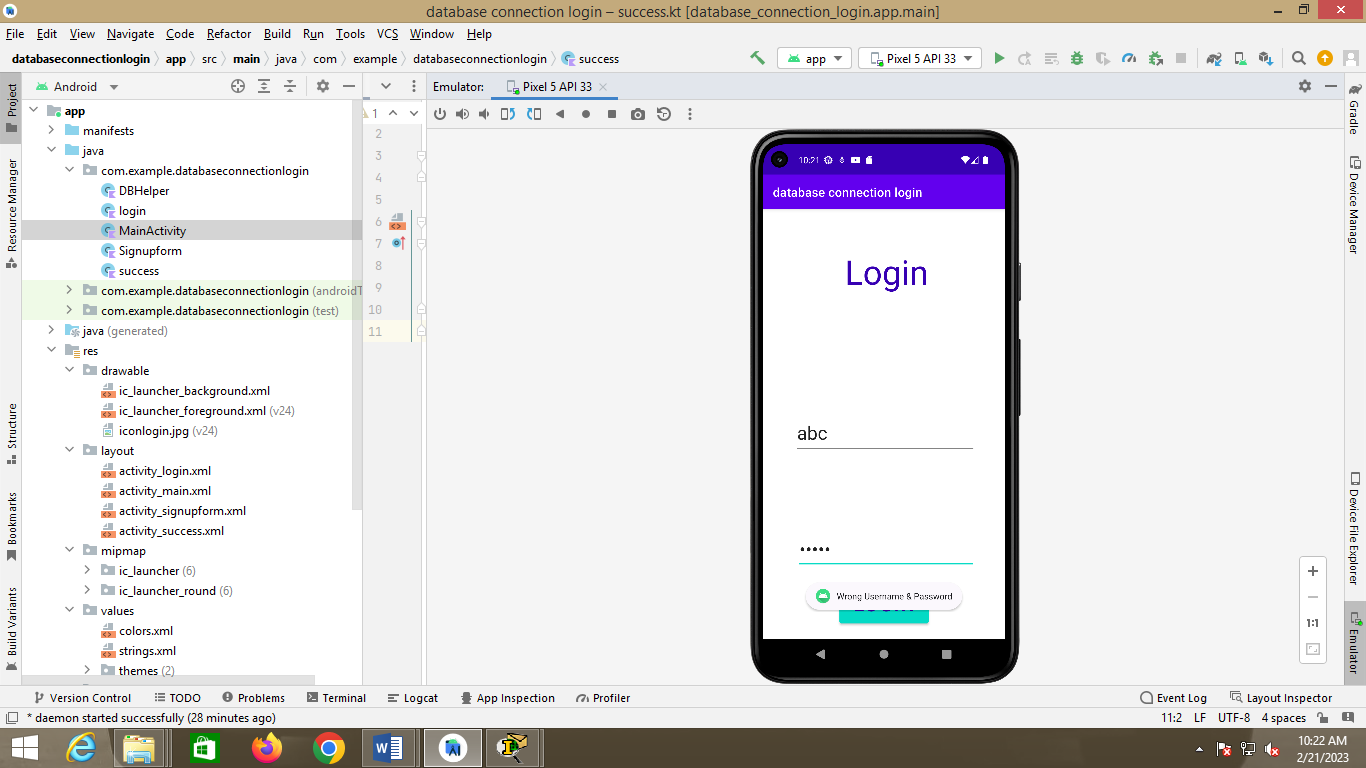
**Activity\_main.xml:-**



**activity\_signup.xml :-**

**activity\_login.xml:-**

**activity\_success.xml :-**

