LAB 5 Program:

XML CODE: Main Activity

*<?*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:layout\_width="189dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="80dp"  
 android:gravity="center"  
 android:text="Lab Program 5"  
 android:textSize="40dp"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent" />  
 <EditText  
 android:id="@+id/username"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:gravity="center"  
 android:hint="User Name"  
 android:text=""  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.258" />  
 <EditText  
 android:id="@+id/password"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:hint="Password"  
 android:gravity="center"  
 android:text=""  
 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" />  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginBottom="228dp"  
 android:text="Register"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintStart\_toStartOf="parent" />  
  
 <Button  
 android:id="@+id/login"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Login"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.822" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

Main Activity.JAVA

package com.example.myapplicationlab5a;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
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 {  
 String username,password;  
 database DB;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 Button btn=findViewById(R.id.*button*);  
 Button login=findViewById(R.id.*login*);  
 EditText usernameText=findViewById(R.id.*username*);  
 EditText passwordText=findViewById(R.id.*password*);  
 DB=new database(this);  
 btn.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 username=usernameText.getText().toString();  
 password=passwordText.getText().toString();  
 boolean result=DB.insertData(username,password);  
 if(result==true){  
 Toast.*makeText*(getApplicationContext(),"Registration Process Completed",Toast.*LENGTH\_LONG*).show();  
 Log.*i*("result"," Registration Completed");  
 }else{  
 Toast.*makeText*(getApplicationContext(),"Cannot Insert data",Toast.*LENGTH\_LONG*).show();  
 Log.*i*("result"," Registration failed");  
 }  
 }  
 });  
  
 login.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 username=usernameText.getText().toString();  
 password=passwordText.getText().toString();  
 Boolean cr=DB.getData(username,password);  
 if(cr==false){  
 Toast.*makeText*(getApplicationContext(),"Invalid credentials", Toast.*LENGTH\_LONG*).show();  
 }else{  
*// Toast.makeText(getApplicationContext(),"Welcome "+username,Toast.LENGTH\_LONG).show();*  
  
startActivity(new Intent(MainActivity.this, welcome.class).putExtra("username", username));  
 }  
 }  
 });  
 }  
}

DATA BASE.JAVA

package com.example.myapplicationlab5a;  
  
import android.content.ContentValues;  
import android.content.Context;  
import android.database.Cursor;  
import android.database.sqlite.SQLiteDatabase;  
import android.database.sqlite.SQLiteOpenHelper;  
  
public class database extends SQLiteOpenHelper {  
 public database( Context context) {  
 super(context, "userdb",null,1);  
 }  
 @Override  
 public void onCreate(SQLiteDatabase db) {  
 db.execSQL("create table user(username TEXT primary key , password TEXT)");  
 }  
 @Override  
 public void onUpgrade(SQLiteDatabase db, int i, int i1) {  
 }  
 public boolean insertData(String username , String password){  
 SQLiteDatabase db=this.getWritableDatabase();  
 ContentValues contentValues=new ContentValues();  
 contentValues.put("username",username);  
 contentValues.put("password",password);  
 long result=db.insert("user",null,contentValues);  
 if(result==-1){  
 return false;  
 }else{  
 return true;  
 }  
 }  
 public boolean getData(String username,String password) {  
 SQLiteDatabase db = this.getReadableDatabase();  
 Cursor cr = db.rawQuery("select \* from user where username='" + username + "' and password=='"+password+"'", null);  
 if (cr.getCount() == 0) {  
 return false;  
 } else {  
 return true;  
 }  
 }  
}

Login Activity.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"  
 android:background="#FFC107"  
 tools:context=".welcome">  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="welcomeTextView"  
 android:textSize="50sp"  
 tools:layout\_editor\_absoluteX="4dp"  
 tools:layout\_editor\_absoluteY="184dp" />  
</androidx.constraintlayout.widget.ConstraintLayout>

Welcome. Java

package com.example.myapplicationlab5a;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.widget.TextView;  
  
public class welcome extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_welcome*);  
 TextView welcomeTextView = findViewById(R.id.*textView*);  
  
 *//username from intent*  
String username = getIntent().getStringExtra("username");  
  
  
 welcomeTextView.setText("Welcome, " + username + "!");  
 }  
}

