**activity\_main.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">  
  
 <TextView  
 android:id="@+id/textView3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="36dp"  
 android:text="Username:"  
 android:textSize="24sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.124"  
 app:layout\_constraintLeft\_toLeftOf="parent"  
 app:layout\_constraintRight\_toRightOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView"  
 app:layout\_constraintVertical\_bias="0.181" />  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="SIGN UP "  
 android:textSize="34sp"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 tools:layout\_editor\_absoluteY="158dp"  
 tools:ignore="MissingConstraints" />  
  
 <TextView  
 android:id="@+id/textView2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="36dp"  
 android:layout\_marginTop="56dp"  
 android:text="Password:"  
 android:textSize="24sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView3" />  
  
 <EditText  
 android:id="@+id/txt\_username"  
 android:layout\_width="184dp"  
 android:layout\_height="40dp"  
 android:layout\_marginTop="112dp"  
 android:ems="10"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.46"  
 app:layout\_constraintStart\_toEndOf="@+id/textView3"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView"  
 tools:ignore="MissingConstraints" />  
  
 <EditText  
 android:id="@+id/txt\_password"  
 android:layout\_width="176dp"  
 android:layout\_height="38dp"  
 android:layout\_marginTop="48dp"  
 android:ems="10"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.436"  
 app:layout\_constraintStart\_toEndOf="@+id/textView2"  
 app:layout\_constraintTop\_toBottomOf="@+id/txt\_username"  
 tools:ignore="MissingConstraints" />  
  
 <Button  
 android:id="@+id/btn\_signup"  
 android:layout\_width="105dp"  
 android:layout\_height="58dp"  
 android:layout\_marginTop="48dp"  
 android:text="SIGN UP"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.432"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView2" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**activity\_main2.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">  
  
 <TextView  
 android:id="@+id/textView4"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="LOGIN"  
 android:textSize="34sp"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 tools:layout\_editor\_absoluteY="109dp"  
 tools:ignore="MissingConstraints" />  
  
 <TextView  
 android:id="@+id/textView5"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="32dp"  
 android:layout\_marginTop="92dp"  
 android:text="Username:"  
 android:textSize="24sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView4" />  
  
 <TextView  
 android:id="@+id/textView6"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="28dp"  
 android:layout\_marginTop="64dp"  
 android:text="Password:"  
 android:textSize="24sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView5" />  
  
 <EditText  
 android:id="@+id/txt\_login\_username"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="92dp"  
 android:ems="10"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.454"  
 app:layout\_constraintStart\_toEndOf="@+id/textView5"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView4"  
 tools:ignore="MissingConstraints" />  
  
 <EditText  
 android:id="@+id/txt\_login\_password"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="36dp"  
 android:ems="10"  
 android:inputType="textPersonName"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.508"  
 app:layout\_constraintStart\_toEndOf="@+id/textView6"  
 app:layout\_constraintTop\_toBottomOf="@+id/txt\_login\_username"  
 tools:ignore="MissingConstraints" />  
  
 <Button  
 android:id="@+id/btn\_login\_signin"  
 android:layout\_width="110dp"  
 android:layout\_height="55dp"  
 android:layout\_marginTop="52dp"  
 android:text="SIGN IN"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.46"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView6" />  
</androidx.constraintlayout.widget.ConstraintLayout>

**MainActivity.java**

package com.example.myapplication;  
  
import androidx.appcompat.app.AppCompatActivity;  
import android.os.Bundle;  
import android.content.Intent;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;  
import java.util.regex.Matcher;  
import java.util.regex.Pattern;  
  
public class MainActivity extends AppCompatActivity implements View.OnClickListener{  
 EditText txtUsername;  
 EditText txtPassword;  
 Button btnSignup;  
 String regularExpression="^(?=.\*[A-Z])(?=.\*[a-z])(?=.\*\\d)(?=.\*[@$!])[A-Za-z\\d@$!]{8,}$";  
 @Override  
  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 txtUsername=(EditText)findViewById(R.id.*txt\_username*);  
 txtPassword=(EditText)findViewById(R.id.*txt\_password*);  
 btnSignup=(Button)findViewById(R.id.*btn\_signup*);  
 btnSignup.setOnClickListener(this);  
 }  
 public void onClick(View v)  
 {  
 String username=txtUsername.getText().toString();  
 String password=txtPassword.getText().toString();  
 if(validatePassword(password)) {  
 Bundle bundle = new Bundle();  
 bundle.putString("user", username);  
 bundle.putString("Lab@2018", password);  
 Intent it = new Intent(this, MainActivity2.class);  
 it.putExtra("data", bundle);  
 startActivity(it);  
 }  
 else  
 {  
 Toast.*makeText*(getBaseContext(), "Invalid Password",  
 Toast.*LENGTH\_LONG*).show();  
 }  
 }  
 public boolean validatePassword(String password)  
 {  
 Pattern pattern= Pattern.*compile*(regularExpression);  
 Matcher matcher=pattern.matcher(password);  
 return matcher.matches();  
 }  
}

**MainActivity2.java**

package com.example.myapplication;  
  
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 MainActivity2 extends AppCompatActivity implements View.OnClickListener {  
 EditText txtLoginUsername;  
 EditText txtLoginPassword;  
 Button btnLogin;  
 String user,pass;  
 int count=0;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main2*);  
 txtLoginUsername=(EditText)  
 findViewById(R.id.*txt\_login\_username*);  
 txtLoginPassword=(EditText)  
 findViewById(R.id.*txt\_login\_password*);  
 btnLogin=(Button)findViewById(R.id.*btn\_login\_signin*);  
 btnLogin.setOnClickListener(this);  
 Bundle bundle=getIntent().getBundleExtra("data");  
 user=bundle.getString("user");  
 pass=bundle.getString("Lab@2018");  
 }  
 public void onClick(View v)  
 {  
 String user1=txtLoginUsername.getText().toString();  
 String pass1=txtLoginPassword.getText().toString();  
 if(user.equals(user1)&&pass.equals(pass1)) {  
 Toast.*makeText*(this, "Login Successful"  
 , Toast.*LENGTH\_LONG*).show();  
 }  
 else  
 {  
 count++;  
 if(count==3)  
 {  
 btnLogin.setEnabled(false);  
 Toast.*makeText*(this,  
 "Failed Login Attempts"  
 ,Toast.*LENGTH\_LONG*).show();  
 }  
 else  
 {  
 Toast.*makeText*(this,"Login Failed "+count  
 ,Toast.*LENGTH\_LONG*).show();  
 }  
 }  
 }  
}