

Mainactivity.java

```
Package com.example.prog3;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
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 signup_username,signup_password;
    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);
        signup_username=(EditText) findViewById(R.id.txt_username);
        signup_password=(EditText) findViewById(R.id.txt_password);
        btnsignup=(Button) findViewById(R.id.btn_signup);
        btnsignup.setOnClickListener(this);
    }

    @Override
    public void onClick(View view)
    {
        String username=signup_username.getText().toString();
        String password=signup_password.getText().toString();
        if(validatePassword(password)){
            Toast.makeText(getApplicationContext(),"valid password",
                Toast.LENGTH_LONG).show();
            Bundle bundle=new Bundle();
            bundle.putString("User",username);
            bundle.putString("Pwd",password);
            Intent it=new Intent(this,Login.class);
            it.putExtra("data",bundle);
            startActivity(it);
        }
        else
        {
            Toast.makeText(getApplicationContext(),"invalid password",
                Toast.LENGTH_LONG).show();
        }
    }

    private boolean validatePassword(String password) {
```

```

        Pattern pattern= Pattern.compile(regularExpression);
        Matcher matcher=pattern.matcher(password);
        return matcher.matches();
    }
}

```

Login.java

```

package com.example.prog3;
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 Login extends AppCompatActivity implements View.OnClickListener
{
    EditText loginusername, loginpassword;
    Button btnlogin ;
    String user,pass;4
    int count=0;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_login);
        loginusername=(EditText) findViewById(R.id.login_username);
        loginpassword=(EditText) findViewById(R.id.login_password);
        btnlogin=(Button) findViewById(R.id.btn_login);
        btnlogin.setOnClickListener(this);
        Bundle bundle=getIntent().getBundleExtra("data");
        user=bundle.getString("User");
        pass=bundle.getString("Pwd");
    }

    @Override
    public void onClick(View view)
    {
        String user1=loginusername.getText().toString();
        String pass1=loginpassword.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();

        }
    }
}
}

```

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:layout_width="270dp"
        android:layout_height="43dp"
        android:text="Signup Activity"
        android:textAlignment="center"
        android:textColor="#D81B60"
        android:textSize="24sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.377"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.047" />

    <TextView
        android:id="@+id/textView"
        android:layout_width="113dp"
        android:layout_height="34dp"
        android:text="Password"
        android:textAlignment="center"
        android:textColor="#D81B60"
        android:textSize="20sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.053"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.335" />

    <TextView
        android:id="@+id/textView2"

```

```

        android:layout_width="101dp"
        android:layout_height="32dp"
        android:text="Username"
        android:textAlignment="center"
        android:textColor="#D81B60"
        android:textSize="20sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.09"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.203" />

<EditText
    android:id="@+id/txt_username"
    android:layout_width="254dp"
    android:layout_height="74dp"
    android:ems="10"
    android:inputType="textPersonName"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.898"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.194" />

<EditText
    android:id="@+id/txt_password"
    android:layout_width="250dp"
    android:layout_height="72dp"
    android:ems="10"
    android:inputType="textPersonName"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.875"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.335" />

<Button
    android:id="@+id/btn_signup"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="signup"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.444"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.54" />

</androidx.constraintlayout.widget.ConstraintLayout>

```

Activity_login.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:layout_width="270dp"
    android:layout_height="43dp"
    android:text="Login Activity"
    android:textAlignment="center"
    android:textColor="#D81B60"
    android:textSize="24sp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintHorizontal_bias="0.377"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.047" />

<TextView
    android:id="@+id/textView"
    android:layout_width="113dp"
    android:layout_height="34dp"
    android:text="Password"
    android:textAlignment="center"
    android:textColor="#D81B60"
    android:textSize="20sp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintHorizontal_bias="0.053"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.335" />

<TextView
    android:id="@+id/textView2"
    android:layout_width="101dp"
    android:layout_height="32dp"
    android:text="Username"
    android:textAlignment="center"
    android:textColor="#D81B60"
    android:textSize="20sp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintHorizontal_bias="0.09"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.203" />

<EditText
    android:id="@+id/login_username"
    android:layout_width="254dp"

```

```
android:layout_height="74dp"
android:ems="10"
android:inputType="textPersonName"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.898"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.194" />
```

```
<EditText
    android:id="@+id/login_password"
    android:layout_width="250dp"
    android:layout_height="72dp"
    android:ems="10"
    android:inputType="textPersonName"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.875"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.335" />
```

```
<Button
    android:id="@+id/btn_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_constraintHorizontal_bias="0.444"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.54" />
```

```
</androidx.constraintlayout.widget.ConstraintLayout>
```