6.

XML code:

Activity main.xml

*<?*xml version="1.0" encoding="utf-8"*?>*<RelativeLayout 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="129dp"  
 android:layout\_height="45dp"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="168dp"  
 android:layout\_marginRight="168dp"  
 android:layout\_marginBottom="596dp"  
 android:text="Sign Up"  
 android:textSize="24sp"  
 android:textStyle="bold"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintLeft\_toLeftOf="parent"  
 app:layout\_constraintRight\_toRightOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
 <EditText  
 android:id="@+id/SignUp\_email"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="114dp"  
 android:layout\_marginRight="114dp"  
 android:layout\_marginBottom="464dp"  
 android:ems="10"  
 android:hint="EmailId"  
 android:inputType="textPersonName" />  
 <Button  
 android:id="@+id/signUpBtn"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="168dp"  
 android:layout\_marginRight="168dp"  
 android:layout\_marginBottom="245dp"  
 android:text="Sign Up" />  
 <EditText  
 android:id="@+id/SignUp\_Password"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="101dp"  
 android:layout\_marginRight="101dp"  
 android:layout\_marginBottom="385dp"  
 android:ems="10"  
 android:hint="Password"  
 android:inputType="textPassword" />  
</RelativeLayout>

Activity login.xml

*<?*xml version="1.0" encoding="utf-8"*?>*<RelativeLayout 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=".loginActivity">  
 <TextView  
 android:id="@+id/loginTextView"  
 android:layout\_width="225dp"  
 android:layout\_height="45dp"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="113dp"  
 android:layout\_marginRight="113dp"  
 android:layout\_marginBottom="544dp"  
 android:text="Login"  
 android:textSize="30sp"  
 android:textStyle="bold"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 tools:layout\_editor\_absoluteX="143dp" />  
 <EditText  
 android:id="@+id/passEditText"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="124dp"  
 android:layout\_marginRight="124dp"  
 android:layout\_marginBottom="380dp"  
 android:ems="10"  
 android:hint="password"  
 android:inputType="textPassword" />  
 <Button  
 android:id="@+id/loginBtn"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="218dp"  
 android:layout\_marginRight="218dp"  
 android:layout\_marginBottom="263dp"  
 android:text="Login" />  
 <EditText  
 android:id="@+id/EmaileditText"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="127dp"  
 android:layout\_marginRight="127dp"  
 android:layout\_marginBottom="455dp"  
 android:ems="10"  
 android:hint="Email ID"  
 android:inputType="textPersonName" />  
</RelativeLayout>

Activity.loginsuccess.xml

*<?*xml version="1.0" encoding="utf-8"*?>*<RelativeLayout 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=".loginsuccessActivity">  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="match\_parent"  
 android:layout\_height="121dp"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentRight="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="-11dp"  
 android:layout\_marginRight="-11dp"  
 android:layout\_marginBottom="322dp"  
 android:text="Login Successful"  
 android:textSize="36sp"  
 android:textStyle="bold" />  
</RelativeLayout>

Java code:

Main activity .java

package com.example.program3;  
  
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.Pattern;  
public class MainActivity extends AppCompatActivity {  
 EditText email\_Sign, password\_Sign;  
 Button signUp\_btn;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 email\_Sign=(EditText)findViewById(R.id.*SignUp\_email*);  
 password\_Sign=(EditText)findViewById(R.id.*SignUp\_Password*);  
 signUp\_btn =(Button)findViewById(R.id.*signUpBtn*);  
 signUp\_btn.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 String email = email\_Sign.getText().toString();  
 String password = password\_Sign.getText().toString();  
 if(!isValidPassword(password)) {  
 Toast.*makeText*(MainActivity.this, "Password doesn't match\n" +  
 " rules", Toast.*LENGTH\_SHORT*).show();  
  
 return;  
 }  
 Intent intent = new Intent(MainActivity.this,loginActivity.class);  
 intent.putExtra("email",email);  
 intent.putExtra("password",password);  
 startActivity(intent);  
 }  
 });  
 }  
 Pattern lowerCase= Pattern.*compile*("^.\*[a-z].\*$");  
 Pattern upperCase=Pattern.*compile*("^.\*[A-Z].\*$");  
 Pattern number = Pattern.*compile*("^.\*[0-9].\*$");  
 Pattern special\_Chara = Pattern.*compile*("^.\*[^a-zA-Z0-9].\*$");  
 private Boolean isValidPassword(String password){  
 if(password.length()<8) {  
 return false;  
 }  
 if(!lowerCase.matcher(password).matches()) {  
 return false;  
 }  
 if(!upperCase.matcher(password).matches()) {  
 return false;  
 }  
 if(!number.matcher(password).matches()) {  
 return false;  
 }  
 if(!special\_Chara.matcher(password).matches()) {  
 return false;  
 }  
 return true;  
 }  
}

loginactivity.java

package com.example.program3;  
  
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;  
public class loginActivity extends AppCompatActivity {  
 EditText emailEditText,passwordEditText;  
 Button login\_btn;  
 int counter=2;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_login*);  
 emailEditText=(EditText)findViewById(R.id.*EmaileditText*);  
 passwordEditText=(EditText)findViewById(R.id.*passEditText*);  
 login\_btn=(Button)findViewById(R.id.*loginBtn*);  
 String registeredEmail = getIntent().getStringExtra("email");  
 String registeredPassword= getIntent().getStringExtra("password");  
 login\_btn.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 String email = emailEditText.getText().toString();  
 String password = passwordEditText.getText().toString();  
 if(registeredEmail.equals(email) && registeredPassword.equals(password))  
 {  
 Intent intent= new Intent(loginActivity.this,loginsuccessActivity.class);  
 startActivity(intent);  
 }  
 else {  
 Toast.*makeText*(loginActivity.this,"Invalid Credentials",Toast.*LENGTH\_SHORT*).show();  
 }  
 counter--;  
 if(counter==0){  
 Toast.*makeText*(getBaseContext(),"failed to login attempts",Toast.*LENGTH\_SHORT*).show();  
 login\_btn.setEnabled(false);  
 }  
 }  
 });  
 }  
}

Loginsuccessactivity.java

package com.example.program3;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
  
public class loginsuccessActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_loginsuccess*);  
 }  
}