**Program3**

**signup\_Activty 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">

<EditText android:id="@+id/editText" android:layout\_width="281dp"

android:layout\_height="63dp" android:layout\_marginStart="128dp"

android:layout\_marginTop="164dp" app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"/>

<EditText android:id="@+id/editText2" android:layout\_width="269dp"

android:layout\_height="65dp" android:layout\_marginStart="140dp"

android:layout\_marginTop="272dp" android:inputType="textPassword"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"/>

<Button android:id="@+id/button" android:layout\_width="192dp"

android:layout\_height="71dp" android:layout\_marginStart="140dp"

android:layout\_marginTop="380dp" android:text="SIGN UP"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"/>

<TextView android:id="@+id/textView3" android:layout\_width="105dp"

android:layout\_height="29dp" android:layout\_marginTop="196dp"

android:layout\_marginEnd="4dp" android:text="Username"

app:layout\_constraintEnd\_toStartOf="@+id/editText"

app:layout\_constraintTop\_toTopOf="parent"/>

<TextView android:id="@+id/textView4" android:layout\_width="113dp"

android:layout\_height="38dp" android:layout\_marginStart="24dp"

android:layout\_marginTop="288dp" android:text="Password"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"/>

</androidx.constraintlayout.widget.ConstraintLayout>

**signup.kt**

import android.content.Intent

import android.os.Bundle

import android.widget.Button

import android.widget.EditText

import android.widget.TextView

import android.widget.Toast

import androidx.appcompat.app.AppCompatActivity

import java.util.regex.Matcher

import java.util.regex.Pattern

class MainActivity : AppCompatActivity() {

private lateinit var unameTxt: EditText

private lateinit var passTxt: EditText

private lateinit var signupBtn: Button

private lateinit var srcIntent: Intent

val p1 = Pattern.compile("[^a-zA-Z0-9]") //For only special characters

val p2 = Pattern.compile("(?=.\*[a-z])") //For atleast 1 small case letter

val p3 = Pattern.compile("(?=.\*[A-Z])") //For atleast 1 Uppercase letter

val p4 = Pattern.compile("(?=.\*[0-9])")

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

setContentView(R.layout.activity\_main)

unameTxt = findViewById(R.id.editText)

passTxt = findViewById(R.id.editText2)

signupBtn = findViewById(R.id.button)

signupBtn.setOnClickListener {

val uname = unameTxt.getText().toString()

val pass = passTxt.getText().toString()

val matcher1: Matcher = p1.matcher(pass) // pass is holding input string

val matcher2: Matcher = p2.matcher(pass)

val matcher3: Matcher = p3.matcher(pass)

val matcher4: Matcher = p4.matcher(pass)

val isStringContainsSpecialCharacter: Boolean =

matcher1.find() // use the find() method to perform pattern matching

val isStringLower: Boolean = matcher2.find()

val isStringUpper: Boolean = matcher3.find()

val isStringDigit: Boolean = matcher4.find()

val passwordLen = pass.length

if (isStringContainsSpecialCharacter && isStringUpper && isStringLower &&

isStringDigit && passwordLen >= 8) {

val srcIntent = Intent(this@MainActivity, MainActivity2::class.java)

val data = Bundle()

data.putString("username", uname)

data.putString("password", pass)

srcIntent.putExtras(data)

startActivity(srcIntent)

} else Toast.makeText(this@MainActivity, "Invalid Password",

Toast.LENGTH\_SHORT).show()

}

}

}

**login\_Activty 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=".MainActivity2">

<EditText android:id="@+id/editText" android:layout\_width="281dp"

android:layout\_height="63dp" android:layout\_marginStart="128dp"

android:layout\_marginTop="164dp" app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"/>

<EditText android:id="@+id/editText2" android:layout\_width="269dp"

android:layout\_height="65dp" android:layout\_marginStart="140dp"

android:layout\_marginTop="272dp" android:inputType="textPassword"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"/>

<Button android:id="@+id/button2" android:layout\_width="193dp"

android:layout\_height="59dp" android:layout\_marginStart="140dp"

android:layout\_marginTop="388dp" android:text="Sign In"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"/>

<TextView android:id="@+id/textView" android:layout\_width="105dp"

android:layout\_height="29dp" android:layout\_marginTop="196dp"

android:layout\_marginEnd="4dp" android:text="Username"

app:layout\_constraintEnd\_toStartOf="@+id/editText"

app:layout\_constraintTop\_toTopOf="parent"/>

<TextView android:id="@+id/textView2" android:layout\_width="113dp"

android:layout\_height="38dp" android:layout\_marginStart="24dp"

android:layout\_marginTop="296dp" android:text="Password"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"/>

login.kt

importandroid.os.Bundle

import android.widget.Button

import android.widget.EditText

import android.widget.Toast

import androidx.appcompat.app.AppCompatActivity

class MainActivity2 : AppCompatActivity() {

private lateinit var loguserTxt: EditText

private lateinit var logpassTxt: EditText

private lateinit var signInBtn: Button

var user: String? = null

var pass:kotlin.String? = null

var bundle: Bundle? = null

var count = 0

override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState)

setContentView(R.layout.activity\_main2)

val i = intent

bundle = i.extras

loguserTxt = findViewById(R.id.editText)

logpassTxt = findViewById(R.id.editText2)

signInBtn = findViewById(R.id.button2)

signInBtn.setOnClickListener{

val user1 = loguserTxt.text.toString()

val pass1 = logpassTxt.text.toString()

if (user == user1 &&pass == pass1) Toast.makeText(

this,

"Login Successful",

Toast.LENGTH\_LONG

).show() else {

count++

if (count == 3) {

signInBtn.isEnabled = false

Toast.makeText(this, "Failed Login Attempts", Toast.LENGTH\_LONG).show()

} else Toast.makeText(this, "Login Failed, Try Again $count",

Toast.LENGTH\_LONG)

.show()

}

}

if (bundle != null) {

user = bundle!!.getString("username")

pass = bundle!!.getString("password")

} else Toast.makeText(applicationContext, "data pass error",

Toast.LENGTH\_SHORT).show()

}