

Experiment No. 4

Aim: Create sample application with login module. (Check username and password), validate it for login screen or alert the user with a Toast.

Program:

- **Activity.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"
    android:orientation="vertical"
    android:background="@color/mor"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/tv1"
        android:text="Login Form"
        android:textStyle="bold"
        android:textSize="35sp"
        android:textColor="@color/purple_500"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="100dp"/>

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/tv2"
        android:text="Name: "
        android:textSize="20dp"
        android:layout_marginTop="175dp"/>

    <EditText
        android:id="@+id/et1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@+id/tv1"
        android:layout_marginLeft="45dp"
        android:layout_marginTop="15dp"
        android:layout_toRightOf="@+id/tv2"
        android:gravity="center"
```

```

        android:hint="Please Enter Your Name"
        android:minHeight="48dp" />

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/tv3"
    android:text="Password:"
    android:textSize="20dp"
    android:layout_marginTop="235dp"/>

<EditText
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/et2"
    android:layout_below="@+id/et1"
    android:layout_marginLeft="15dp"
    android:layout_marginTop="15dp"
    android:layout_toRightOf="@+id/tv3"
    android:gravity="center"
    android:hint="Please Enter Your Password"
    android:inputType="textPassword"
    android:minHeight="48dp"/>

<Button
    android:id="@+id/log"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="35dp"
    android:padding="13dp"
    android:layout_marginLeft="175dp"
    android:layout_below="@+id/et2"
    android:text="Login"
    android:onClick="Login"
/>
</RelativeLayout>

```

- **colors.xml :-**

```

<?xml version="1.0" encoding="utf-8"?>
<resources>
    <color name="purple_200">#FFBB86FC</color>
    <color name="purple_500">#FF6200EE</color>
    <color name="purple_700">#FF3700B3</color>
    <color name="teal_200">#FF03DAC5</color>
    <color name="teal_700">#FF018786</color>
    <color name="black">#FF000000</color>
    <color name="white">#FFFFFFFF</color>
    <color name="mor">#08E3FF</color>
</resources>

```

- **MainActivity.java :-**

```
package com.example.login;

import static com.example.login.R.id.log;

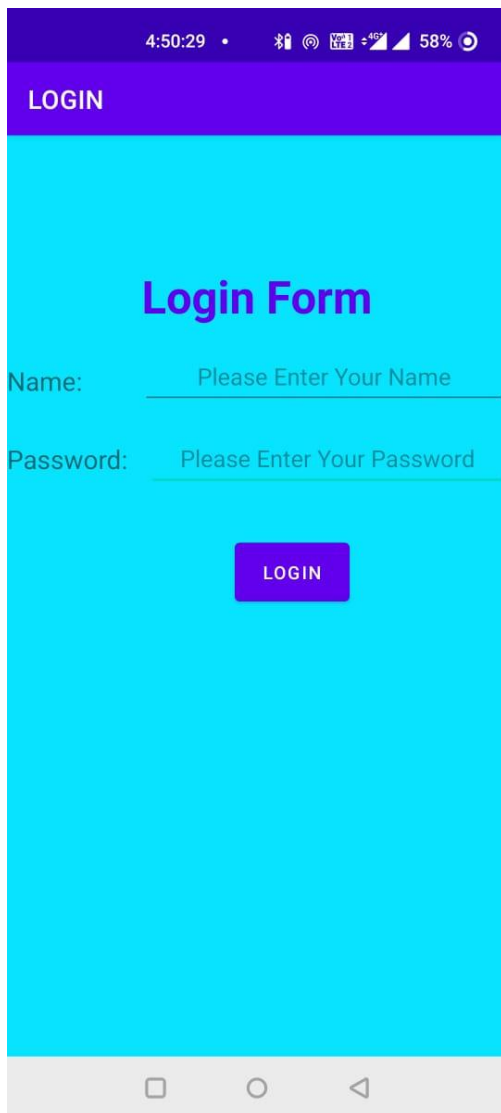
import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

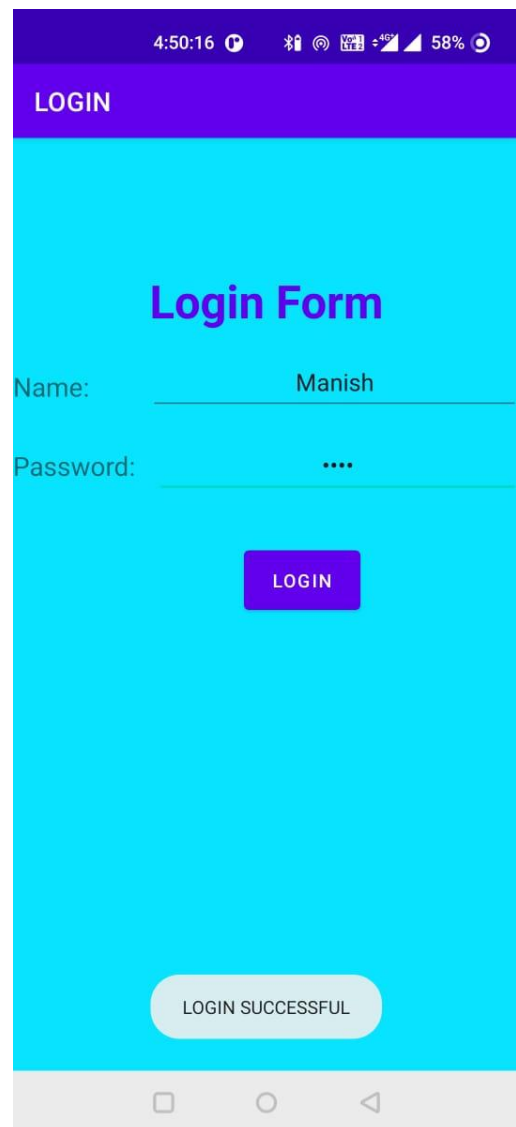
public class MainActivity extends AppCompatActivity {
    EditText ed1, ed2;
    Button bt;
    String uname, upass;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        ed1 = findViewById(R.id.et1);
        ed2 = findViewById(R.id.et2);
        bt = findViewById(R.id.log);
    }

    public void Login(View view) {
        uname = ed1.getText().toString();
        upass = ed2.getText().toString();
        if (uname.equals("Manish") && upass.equals("2809")){
            Toast.makeText(this, "LOGIN SUCCESSFUL",
Toast.LENGTH_SHORT).show();
        }
        else {
            Toast.makeText(this, "LOGIN FAILED",
Toast.LENGTH_SHORT).show();
        }
    }
}
```

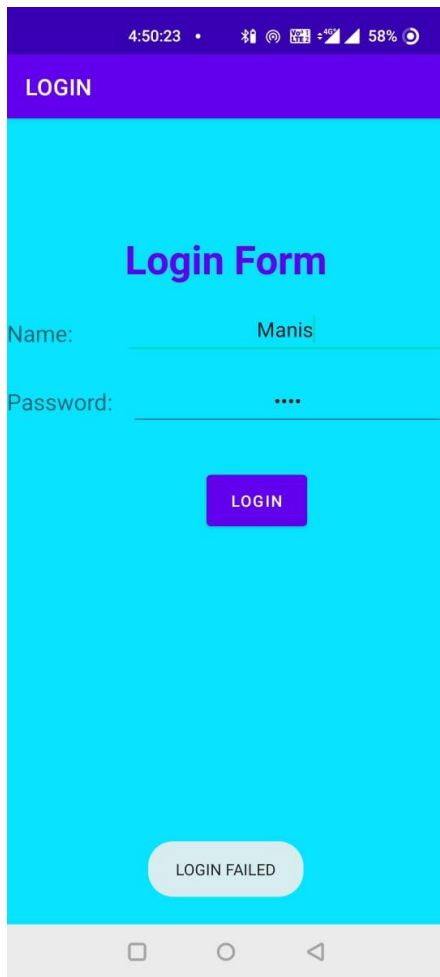
Output:



This screenshot shows the initial state of the login application. The status bar at the top displays the time as 4:50:29, signal strength, Wi-Fi, and 58% battery. The app's title bar is red and contains the word "LOGIN". The main content area has a light blue background with the title "Login Form" in bold black text. Below the title are two input fields: "Name:" with the placeholder text "Please Enter Your Name" and "Password:" with the placeholder text "Please Enter Your Password". A red "LOGIN" button is positioned below the password field. The bottom of the screen shows the standard Android navigation bar.



This screenshot shows the login form after a successful login. The status bar at the top displays the time as 4:50:16, signal strength, Wi-Fi, and 58% battery. The app's title bar is red and contains the word "LOGIN". The main content area has a light blue background with the title "Login Form" in bold black text. The "Name:" field now contains the text "Manish" and the "Password:" field contains four dots. A red "LOGIN" button is positioned below the password field. At the bottom of the screen, a white rounded rectangle contains the text "LOGIN SUCCESSFUL". The bottom of the screen shows the standard Android navigation bar.



Conclusion:

Hence, by completing this experiment I came to know that how to Create application for demonstration of android activity life cycle.

Writeup & Oral (4)	Practical Performance (4)	Attendance (2)	Total (10)