Practical No.: 4

Aim: Login Application

Source Code:

Activity_main.xml

```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/etName"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="10"
        android:hint="@string/name"
        android:inputType="textPersonName"
        android:layout_marginStart="8dp"
        android:layout_marginEnd="8dp"
        android:layout_marginBottom="8dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.119"
        android:autofillHints="" />

    <EditText
        android:id="@+id/etPassword"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:ems="10"
        android:hint="@string/password"
        android:inputType="textPersonName"
        android:layout_marginStart="8dp"
        android:layout_marginTop="8dp"
        android:layout_marginEnd="8dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/etName"
        app:layout_constraintVertical_bias="0.135"
        tools:ignore="TextFields"
        android:autofillHints="" />

    <Button
        android:id="@+id/btnLogin"
        android:layout_width="wrap_content"
```

```xml
        android:layout_height="wrap_content"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        android:text="@string/login"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_editor_absoluteX="144dp"
        app:layout_editor_absoluteY="341dp" />

    <TextView
        android:id="@+id/tvInfo"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="8dp"
        android:layout_marginLeft="8dp"
        android:layout_marginTop="472dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.488"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

MainActivity.xml

```java
package com.example.practical_no_4;

import androidx.appcompat.app.AppCompatActivity;
import android.annotation.SuppressLint;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

    private Button Login;
    private EditText Name,Password;
    private TextView Info;
    private int counter=3;

    @SuppressLint("SetTextI18n")
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        Name=findViewById(R.id.etName);
        Password=findViewById(R.id.etPassword);

        Login=findViewById(R.id.btnLogin);
        Info=findViewById(R.id.tvInfo);
```

```java
        Info.setText("No of attempts remaining : "+counter);

    Login.setOnClickListener(
        new View.OnClickListener() {
           @Override
           public void onClick(View v) {
              validate(Name.getText().toString(),Password.getText().toString());
           }
        }
    );
  }
  private void validate(String UserName,String PassWord)
  {
    if(UserName.equals("admin") && PassWord.equals("admin"))
    {
      Intent intent=new Intent(MainActivity.this,SecondActivity.class);
      startActivity(intent);
    }
    else
    {
      counter--;
      Info.setText("No of attempts remaining : "+counter);
      if(counter==0)
      {
        Login.setEnabled(false);
      }
    }
  }
}
```

Activity_second.xml

```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=".SecondActivity">

   <EditText
     android:id="@+id/editText"
     android:layout_width="wrap_content"
     android:layout_height="wrap_content"
     android:ems="10"
     android:inputType="textPersonName"
     android:text="@string/welcome"
     app:layout_constraintBottom_toBottomOf="parent"
     app:layout_constraintEnd_toEndOf="parent"
     app:layout_constraintStart_toStartOf="parent"
     app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

Strings.xml

```xml
<resources>
    <string name="app_name">Practical_No_4</string>
    <string name="name">Name</string>
    <string name="password">Password</string>
    <string name="welcome">welcome</string>
    <string name="login">Login</string>
</resources>
```

Output: