**PRACTICAL-2.2**

**AIM:**

**Create a login Create application with following features:**

**1. Successful Login message in TextView with Green background if Username & password is correct**

**2. Failure message in TextView with Red background if Username or password is incorrect.**

**3. Disable Login Button after three wrong login attempts.**

**4. Close application if user selects Cancel Button.**

**PROGRAM CODE:**

* **XML CODE:**

<?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/Name"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:ems="10"

android:hint="@string/name"

android:importantForAutofill="no"

android:inputType="textPersonName"

android:minHeight="50dp"

android:textAlignment="center"

android:textColor="#FF9800"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.442"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.176" />

<EditText

android:id="@+id/Password"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:ems="10"

android:hint="@string/password"

android:importantForAutofill="no"

android:inputType="textPassword"

android:minHeight="50dp"

android:textAlignment="center"

android:textColor="#FF5722"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.442"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/Name"

app:layout\_constraintVertical\_bias="0.144"

tools:ignore="TextContrastCheck,TextContrastCheck" />

<Button

android:id="@+id/Login"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:backgroundTint="#00BCD4"

android:text="@string/login"

android:textColor="#EBEBE7"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.461"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/Password"

app:layout\_constraintVertical\_bias="0.163"

app:rippleColor="#E91E63"

tools:ignore="TextContrastCheck" />

<TextView

android:id="@+id/attempt"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:fontFamily="sans-serif-medium"

android:text="@string/number\_of\_incorrect\_attempts"

android:textAlignment="center"

android:textColor="#DD2C00"

android:textSize="16sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.455"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/Login"

app:layout\_constraintVertical\_bias="0.209"

tools:ignore="TextContrastCheck,TextContrastCheck"/>

<TextView

android:id="@+id/message"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:fontFamily="serif"

android:textAlignment="center"

android:textColor="#BF360C"

android:textSize="20sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/attempt" />

</androidx.constraintlayout.widget.ConstraintLayout>

* **JAVA CODE:**

package com.parthnpatel.login;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.graphics.Color;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

private EditText Name;

private EditText Password;

private TextView message;

private TextView attempt;

private Button Login;

private int counter = 3;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

Name=findViewById(R.id.Name);

Password=findViewById(R.id.Password);

attempt=findViewById(R.id.attempt);

Login=findViewById(R.id.Login);

message=findViewById(R.id.message);

attempt.setText("Attempts Remaining : "+counter);

Login.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

String enteredName=Name.getText().toString();

String enteredPassword=Password.getText().toString();

if(enteredName.isEmpty() || enteredPassword.isEmpty()){

Toast.makeText(getApplicationContext(), "Enter the necessary Details Please!!", Toast.LENGTH\_SHORT).show();

}

else{

if(enteredName.equals("Parth") && enteredPassword.equals("admin1234")){

message.setText("Credentials validated!!\n Logged in !!");

message.setBackgroundColor(Color.GREEN);

}

else{

counter--;

Toast.makeText(getApplicationContext(), "Enter the Correct Credentials!!", Toast.LENGTH\_SHORT).show();

attempt.setText("Attempts Remaining : "+counter);

}

}

if(counter<=0){

Login.setEnabled(false);

}

message.setText("You have no attempts left for login!!\nPlease Close the app and Try Again!!");

message.setBackgroundColor(Color.RED);

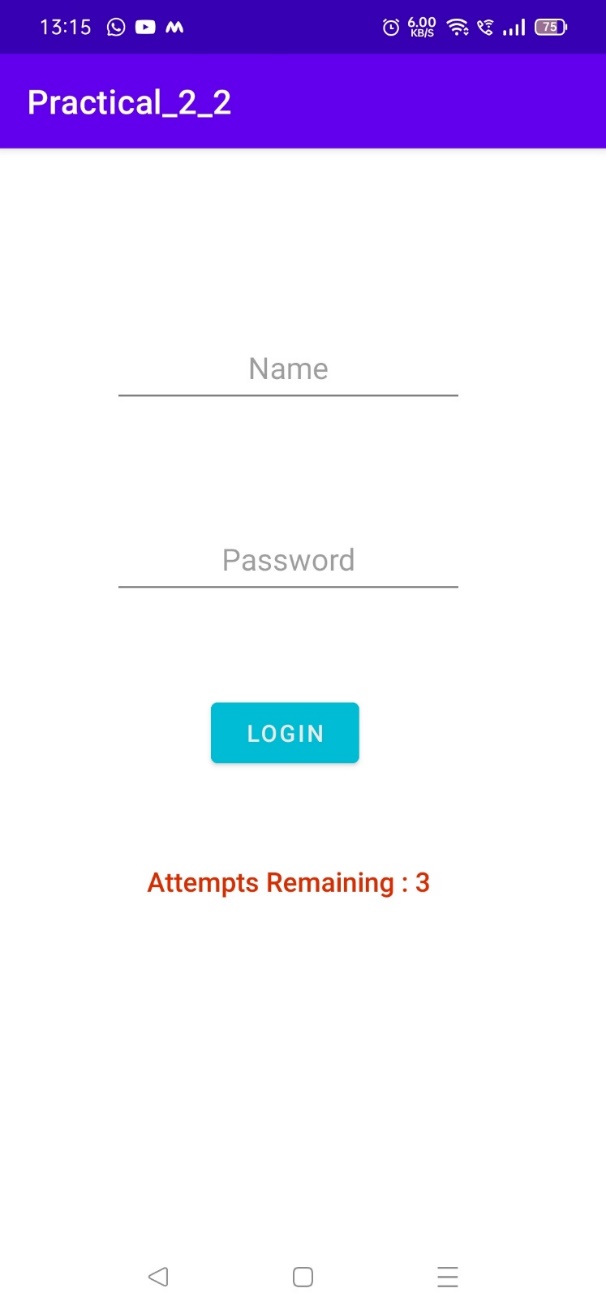
}

});

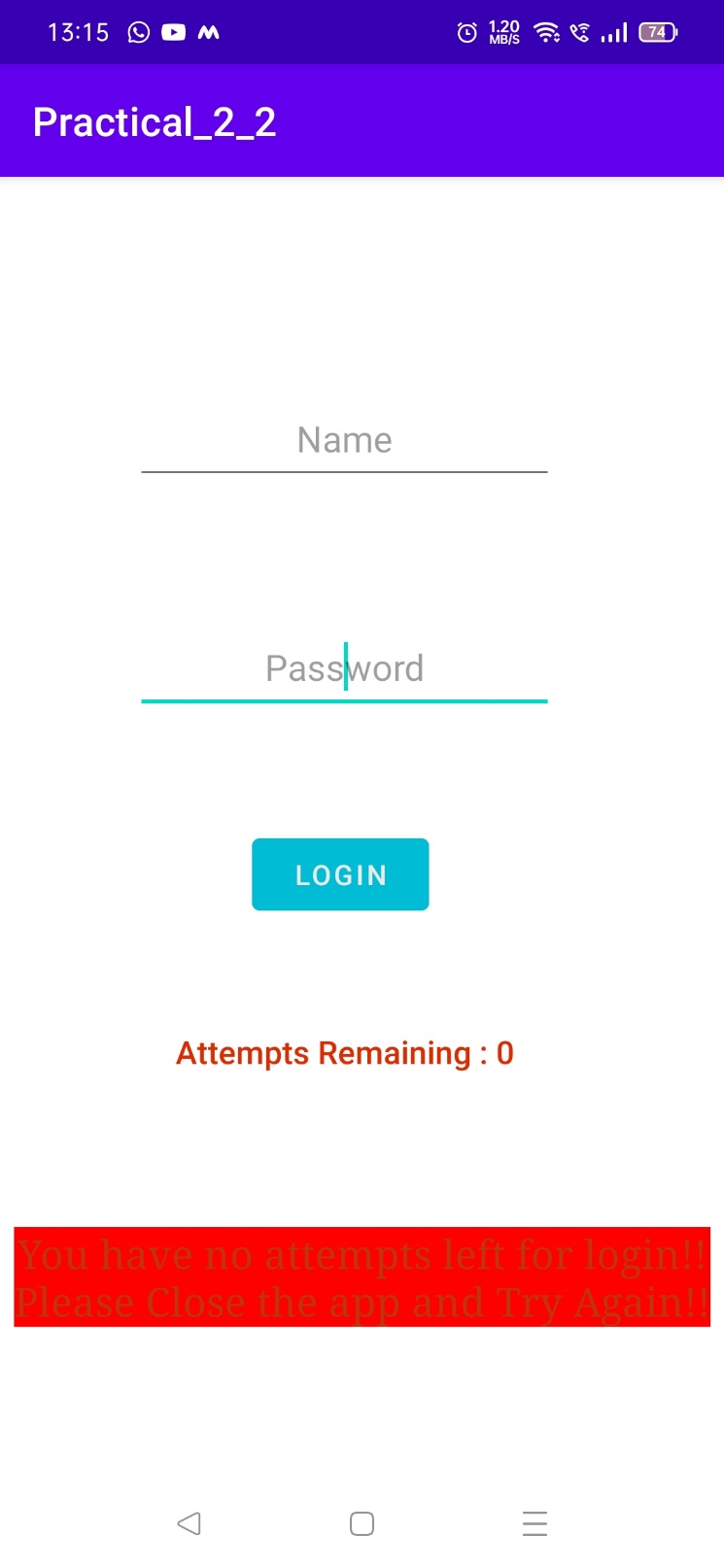
}

}

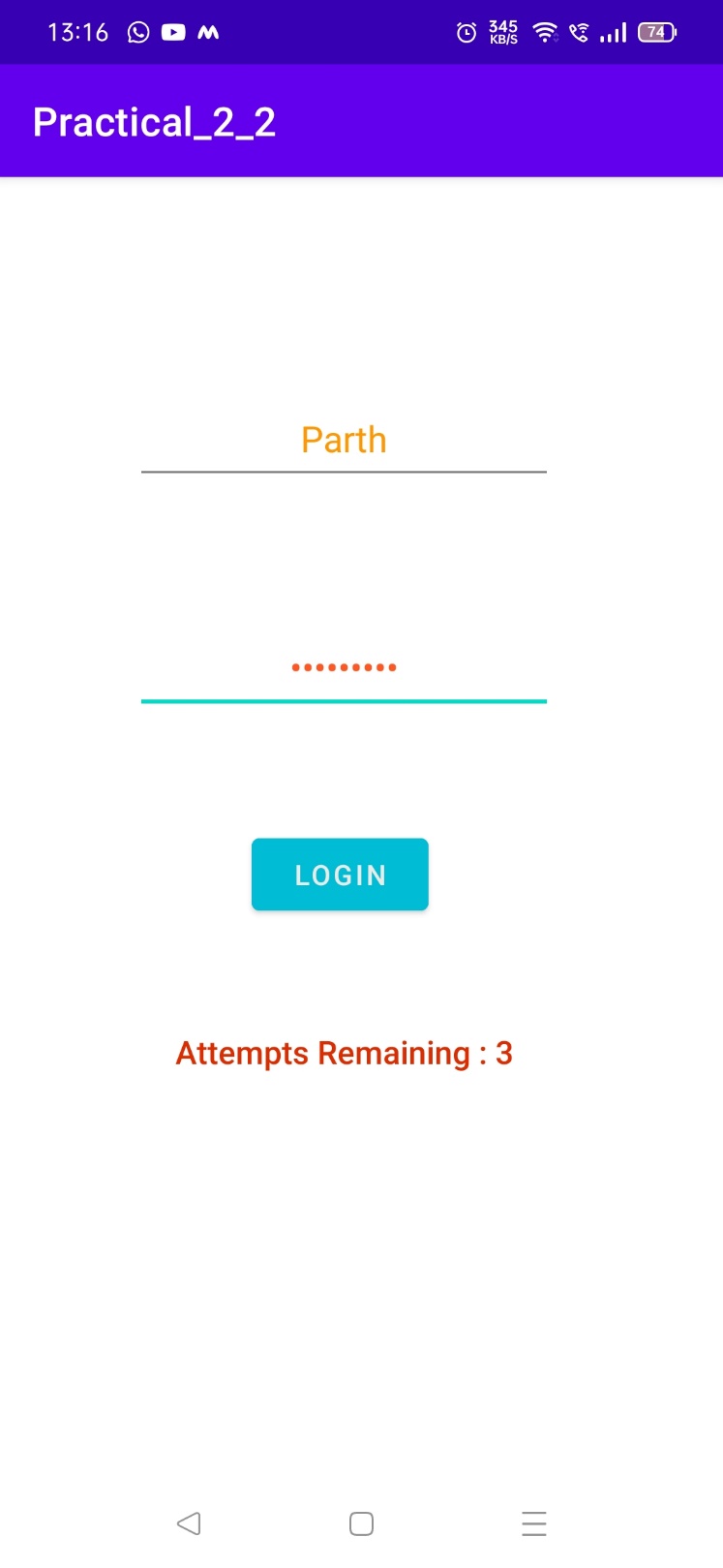
**OUTPUT:**



**BASIC UI**



**MESSAGE DISPLAYED WHEN ZERO ATTEMPTS LEFT**



**EDIT TEXT AND PASSWORD DISPLAY**