Experiment Number 28 (Exercise 1):
Write a program to create the login form with necessary validations like length of username and password, empty text fields, count of unsuccessful login attempts. Display the login successful/Unsuccessful toastmessage.

// Code for MainActivity.java file:

```java
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.EditText;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {
    EditText username, password;
    TextView textView;


    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        username = findViewById(R.id.editText1);
        password = findViewById(R.id.editText2);
        textView = findViewById(R.id.textview1);
    }

    public boolean login(View view) {

        boolean valid = true;

        String user = username.getText().toString();
        String pass = password.getText().toString();

        if (user.isEmpty()) {
            username.setError("Enter a valid Username");
            valid = false;
        }
        else {
            username.setError(null);
        }

        if (pass.isEmpty() || pass.length() <= 6 || pass.length() >=8) {
            password.setError(" Password must between 6 to 8 alphanumeric characters");
            valid = false;
        }
        else {
            password.setError(null);
        }

        return valid;
    }
}
```

// Code for ActivityMain.xml file:

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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"
    android:orientation="vertical"
    android:background="#006064">

    <TextView
        android:layout_width = "wrap_content"
        android:layout_height = "wrap_content"
        android:layout_marginTop="30dp"
        android:textSize="25dp"
        android:paddingHorizontal="5dp"
        android:text="DEMO OF PrNo 28"
        android:textColor="#EFEAE6"
        android:textStyle="bold" />

    <EditText
        android:id = "@+id/editText1"
        android:layout_width = "wrap_content"
        android:layout_height = "wrap_content"
        android:hint="Enter Username"
        android:background="@color/white"
        android:layout_marginTop="30dp"
        android:textSize="25dp"
        android:paddingHorizontal="5dp"/>

    <EditText
        android:id = "@+id/editText2"
        android:layout_width = "wrap_content"
        android:layout_height = "wrap_content"
        android:inputType = "textPassword"
        android:hint="Enter Password"
        android:background="@color/white"
        android:layout_marginTop="30dp"
        android:textSize="25dp"
        android:paddingHorizontal="5dp"/>

    <TextView
        android:id="@+id/textview1"
        android:layout_width = "wrap_content"
        android:layout_height = "wrap_content"
        android:layout_marginTop="10dp"
        android:textSize="25dp"
        android:paddingHorizontal="5dp"
        android:text="Preess Login Button"
        android:textColor="#FF5252"/>

    <Button
        android:id = "@+id/button1"
        android:layout_width = "wrap_content"
        android:layout_height = "wrap_content"
        android:onClick = "login"
        android:text = "@string/Login"
        android:layout_marginTop="20dp"
```

```
        android:background="#64DD17"
        android:textAllCaps="false"
        android:textSize="20dp"/>

</LinearLayout>
```

Output: