**LAB**

Name : Keerthana Dinesh A

Roll No : 11

Batch : R-MCA B

Date : 13-09-2022

# EXPERIMENT : 1

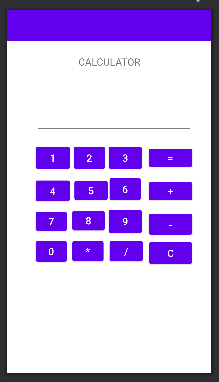
**AIM:**

Design a simple calculator, and set properties using .xml file.

**SOURCE 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">  
  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="63dp"  
 android:layout\_height="56dp"  
 android:text="2"  
 android:textSize="20"  
 tools:layout\_editor\_absoluteX="135dp"  
 tools:layout\_editor\_absoluteY="270dp" />  
  
 <Button  
 android:id="@+id/button2"  
 android:layout\_width="69dp"  
 android:layout\_height="56dp"  
 android:text="1"  
 android:textSize="20"  
 tools:layout\_editor\_absoluteX="58dp"  
 tools:layout\_editor\_absoluteY="270dp" />  
  
 <Button  
 android:id="@+id/button3"  
 android:layout\_width="67dp"  
 android:layout\_height="56dp"  
 android:text="3"  
 android:textSize="20"  
 tools:layout\_editor\_absoluteX="205dp"  
 tools:layout\_editor\_absoluteY="270dp" />  
  
 <Button  
 android:id="@+id/button4"  
 android:layout\_width="69dp"  
 android:layout\_height="53dp"  
 android:text="4"  
 android:textSize="20"  
 tools:layout\_editor\_absoluteX="58dp"  
 tools:layout\_editor\_absoluteY="338dp" />  
  
 <Button  
 android:id="@+id/button5"  
 android:layout\_width="67dp"  
 android:layout\_height="50dp"  
 android:text="5"  
 android:textSize="20"  
 tools:layout\_editor\_absoluteX="136dp"  
 tools:layout\_editor\_absoluteY="339dp" />  
  
 <Button  
 android:id="@+id/button6"  
 android:layout\_width="63dp"  
 android:layout\_height="56dp"  
 android:text="6"  
 android:textSize="20"  
 tools:layout\_editor\_absoluteX="207dp"  
 tools:layout\_editor\_absoluteY="333dp" />  
  
 <Button  
 android:id="@+id/button7"  
 android:layout\_width="63dp"  
 android:layout\_height="50dp"  
 android:text="7"  
 android:textSize="20"  
 tools:layout\_editor\_absoluteX="58dp"  
 tools:layout\_editor\_absoluteY="401dp" />  
  
 <Button  
 android:id="@+id/button8"  
 android:layout\_width="65dp"  
 android:layout\_height="51dp"  
 android:text="8"  
 android:textSize="20"  
 tools:layout\_editor\_absoluteX="132dp"  
 tools:layout\_editor\_absoluteY="399dp" />  
  
 <Button  
 android:id="@+id/button9"  
 android:layout\_width="67dp"  
 android:layout\_height="58dp"  
 android:layout\_marginTop="8dp"  
 android:text="9"  
 android:textSize="20"  
 app:layout\_constraintTop\_toBottomOf="@+id/button6"  
 tools:layout\_editor\_absoluteX="205dp" />  
  
 <Button  
 android:id="@+id/button10"  
 android:layout\_width="63dp"  
 android:layout\_height="53dp"  
 android:text="0"  
 android:textSize="20"  
 tools:layout\_editor\_absoluteX="58dp"  
 tools:layout\_editor\_absoluteY="460dp" />  
  
 <Button  
 android:id="@+id/button11"  
 android:layout\_width="63dp"  
 android:layout\_height="52dp"  
 android:text="\*"  
 android:textSize="20"  
 tools:layout\_editor\_absoluteX="132dp"  
 tools:layout\_editor\_absoluteY="460dp" />  
  
 <Button  
 android:id="@+id/button12"  
 android:layout\_width="67dp"  
 android:layout\_height="52dp"  
 android:text="/"  
 android:textSize="20"  
 tools:layout\_editor\_absoluteX="207dp"  
 tools:layout\_editor\_absoluteY="460dp" />  
  
 <Button  
 android:id="@+id/button13"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="="  
 android:textSize="20"  
 tools:layout\_editor\_absoluteX="286dp"  
 tools:layout\_editor\_absoluteY="274dp" />  
  
 <Button  
 android:id="@+id/button14"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="+"  
 android:textSize="20"  
 tools:layout\_editor\_absoluteX="286dp"  
 tools:layout\_editor\_absoluteY="341dp" />  
  
 <Button  
 android:id="@+id/button15"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="-"  
 android:textSize="25"  
 tools:layout\_editor\_absoluteX="286dp"  
 tools:layout\_editor\_absoluteY="405dp" />  
  
 <Button  
 android:id="@+id/button16"  
 android:layout\_width="86dp"  
 android:layout\_height="56dp"  
 android:text="C"  
 android:textSize="20"  
 tools:layout\_editor\_absoluteX="287dp"  
 tools:layout\_editor\_absoluteY="462dp" />  
  
 <EditText  
 android:id="@+id/editTextTextPersonName2"  
 android:layout\_width="315dp"  
 android:layout\_height="45dp"  
 android:ems="10"  
 android:inputType="textPersonName"  
 android:text=""  
 tools:layout\_editor\_absoluteX="58dp"  
 tools:layout\_editor\_absoluteY="202dp" />  
  
 <androidx.appcompat.widget.Toolbar  
 android:id="@+id/toolbar"  
 android:layout\_width="415dp"  
 android:layout\_height="62dp"  
 android:background="?attr/colorPrimary"  
 android:minHeight="?attr/actionBarSize"  
 android:theme="?attr/actionBarTheme"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 tools:layout\_editor\_absoluteY="0dp" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**Output**

****

# EXPERIMENT : 2

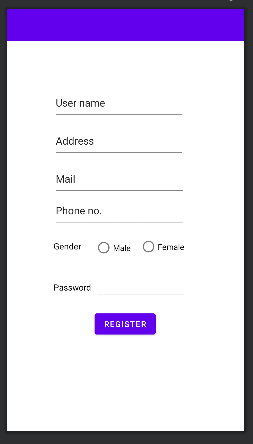
**AIM:**

Develop an application for a simple registration page using .xml file.

**SOURCE 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/editTextTextPersonName2"  
        android:layout\_width="227dp"  
        android:layout\_height="58dp"  
        android:ems="10"  
        android:inputType="textPersonName"  
        android:text="User name"  
        tools:layout\_editor\_absoluteX="81dp"  
        tools:layout\_editor\_absoluteY="134dp" />  
  
    <EditText  
        android:id="@+id/editTextTextPersonName3"  
        android:layout\_width="227dp"  
        android:layout\_height="56dp"  
        android:ems="10"  
        android:inputType="textPersonName"  
        android:text="Address"  
        tools:layout\_editor\_absoluteX="81dp"  
        tools:layout\_editor\_absoluteY="201dp" />  
  
    <EditText  
        android:id="@+id/editTextTextPersonName4"  
        android:layout\_width="228dp"  
        android:layout\_height="56dp"  
        android:ems="10"  
        android:inputType="textPersonName"  
        android:text="Mail"  
        tools:layout\_editor\_absoluteX="81dp"  
        tools:layout\_editor\_absoluteY="267dp" />  
  
    <EditText  
        android:id="@+id/editTextTextPersonName5"  
        android:layout\_width="228dp"  
        android:layout\_height="57dp"  
        android:ems="10"  
        android:inputType="textPersonName"  
        android:text="Phone no."  
        tools:layout\_editor\_absoluteX="81dp"  
        tools:layout\_editor\_absoluteY="321dp" />  
  
    <Button  
        android:id="@+id/button"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:backgroundTint="@color/purple\_500"  
        android:text="Register"  
        android:textColor="@color/white"  
        tools:layout\_editor\_absoluteX="152dp"  
        tools:layout\_editor\_absoluteY="522dp" />  
  
    <RadioButton  
        android:id="@+id/radioButton"  
        android:layout\_width="77dp"  
        android:layout\_height="40dp"  
        android:text="Male"  
        tools:layout\_editor\_absoluteX="152dp"  
        tools:layout\_editor\_absoluteY="394dp" />  
  
    <TextView  
        android:id="@+id/textView"  
        android:layout\_width="53dp"  
        android:layout\_height="26dp"  
        android:text="Gender"  
        android:textColor="@color/black"  
        android:textSize="15"  
        tools:layout\_editor\_absoluteX="81dp"  
        tools:layout\_editor\_absoluteY="401dp" />  
  
    <RadioButton  
        android:id="@+id/radioButton2"  
        android:layout\_width="78dp"  
        android:layout\_height="36dp"  
        android:text="Female"  
        tools:layout\_editor\_absoluteX="230dp"  
        tools:layout\_editor\_absoluteY="394dp" />  
  
    <androidx.appcompat.widget.Toolbar  
        android:id="@+id/toolbar"  
        android:layout\_width="420dp"  
        android:layout\_height="64dp"  
        android:background="@color/purple\_500"  
        android:minHeight="?attr/actionBarSize"  
        android:theme="?attr/actionBarTheme"  
        app:layout\_constraintEnd\_toEndOf="parent"  
        tools:layout\_editor\_absoluteY="-9dp" />  
  
    <androidx.cardview.widget.CardView  
        android:layout\_width="409dp"  
        android:layout\_height="wrap\_content"  
        tools:layout\_editor\_absoluteX="1dp"  
        tools:layout\_editor\_absoluteY="111dp" />  
  
    <EditText  
        android:id="@+id/editTextTextPassword2"  
        android:layout\_width="159dp"  
        android:layout\_height="46dp"  
        android:ems="10"  
        android:inputType="textPassword"  
        tools:layout\_editor\_absoluteX="152dp"  
        tools:layout\_editor\_absoluteY="458dp" />  
  
    <TextView  
        android:id="@+id/textView2"  
        android:layout\_width="66dp"  
        android:layout\_height="24dp"  
        android:text="Password"  
        android:textColor="@color/black"  
        android:textSize="15"  
        tools:layout\_editor\_absoluteX="81dp"  
        tools:layout\_editor\_absoluteY="472dp" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**Output**

****

# EXPERIMENT : 3

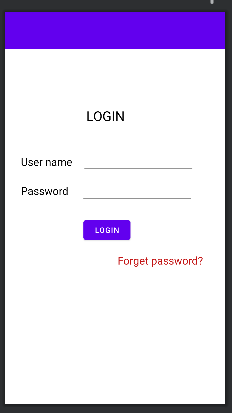
**AIM:**

Design an application for the login page using .xml file.

**SOURCE 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/editTextTextPersonName"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:ems="10"  
        android:inputType="textPersonName"  
        android:text=""  
        tools:layout\_editor\_absoluteX="145dp"  
        tools:layout\_editor\_absoluteY="255dp" />  
  
    <TextView  
        android:id="@+id/textView"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:text="User name"  
        android:textColor="@color/black"  
        android:textSize="20"  
        tools:layout\_editor\_absoluteX="30dp"  
        tools:layout\_editor\_absoluteY="266dp" />  
  
    <TextView  
        android:id="@+id/textView2"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:text="Password"  
        android:textColor="@color/black"  
        android:textSize="20"  
        tools:layout\_editor\_absoluteX="30dp"  
        tools:layout\_editor\_absoluteY="320dp" />  
  
    <EditText  
        android:id="@+id/editTextTextPersonName2"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:ems="10"  
        android:inputType="textPersonName"  
        android:text=""  
        tools:layout\_editor\_absoluteX="143dp"  
        tools:layout\_editor\_absoluteY="311dp" />  
  
    <Button  
        android:id="@+id/button"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:text="Login"  
        tools:layout\_editor\_absoluteX="147dp"  
        tools:layout\_editor\_absoluteY="383dp" />  
  
    <androidx.appcompat.widget.Toolbar  
        android:id="@+id/toolbar"  
        android:layout\_width="433dp"  
        android:layout\_height="69dp"  
        android:background="?attr/colorPrimary"  
        android:minHeight="?attr/actionBarSize"  
        android:theme="?attr/actionBarTheme"  
        tools:layout\_editor\_absoluteX="-4dp" />  
  
    <TextView  
        android:id="@+id/textView3"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:text="LOGIN"  
        android:textColor="@color/black"  
        android:textSize="25"  
        tools:layout\_editor\_absoluteX="152dp"  
        tools:layout\_editor\_absoluteY="177dp" />  
  
    <TextView  
        android:id="@+id/textView4"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:text="Forget password?"  
        android:textColor="#C31616"  
        android:textSize="20"  
        tools:layout\_editor\_absoluteX="211dp"  
        tools:layout\_editor\_absoluteY="450dp" />  
</androidx.constraintlayout.widget.ConstraintLayout>

**Output**

****

# EXPERIMENT : 4

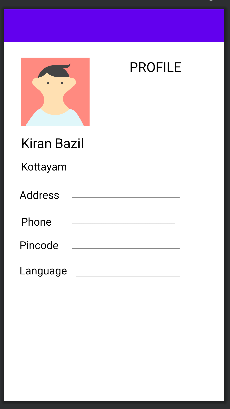
**AIM:**

Develop your Profile page using .xml file.

**SOURCE 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">  
  
    <androidx.appcompat.widget.Toolbar  
        android:id="@+id/toolbar"  
        android:layout\_width="439dp"  
        android:layout\_height="61dp"  
        android:background="?attr/colorPrimary"  
        android:minHeight="?attr/actionBarSize"  
        android:theme="?attr/actionBarTheme"  
        tools:layout\_editor\_absoluteX="-14dp"  
        tools:layout\_editor\_absoluteY="1dp" />  
  
    <ImageView  
        android:id="@+id/imageView"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        tools:layout\_editor\_absoluteX="32dp"  
        tools:layout\_editor\_absoluteY="91dp"  
        tools:srcCompat="@tools:sample/avatars" />  
  
    <TextView  
        android:id="@+id/textView"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:text="Kiran Bazil"  
        android:textColor="@color/black"  
        android:textSize="25"  
        tools:layout\_editor\_absoluteX="32dp"  
        tools:layout\_editor\_absoluteY="233dp" />  
  
    <TextView  
        android:id="@+id/textView2"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:text="Kottayam"  
        android:textColor="@color/black"  
        android:textSize="20"  
        tools:layout\_editor\_absoluteX="32dp"  
        tools:layout\_editor\_absoluteY="280dp" />  
  
    <TextView  
        android:id="@+id/textView3"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:text="PROFILE"  
        android:textColor="@color/black"  
        android:textSize="25"  
        tools:layout\_editor\_absoluteX="235dp"  
        tools:layout\_editor\_absoluteY="91dp" />  
  
    <TextView  
        android:id="@+id/textView4"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:text="Address"  
        android:textColor="@color/black"  
        android:textSize="20"  
        tools:layout\_editor\_absoluteX="29dp"  
        tools:layout\_editor\_absoluteY="333dp" />  
  
    <TextView  
        android:id="@+id/textView6"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:text="Phone"  
        android:textColor="@color/black"  
        android:textSize="20"  
        tools:layout\_editor\_absoluteX="32dp"  
        tools:layout\_editor\_absoluteY="383dp" />  
  
    <TextView  
        android:id="@+id/textView7"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:text="Pincode"  
        android:textColor="@color/black"  
        android:textSize="20"  
        tools:layout\_editor\_absoluteX="29dp"  
        tools:layout\_editor\_absoluteY="427dp" />  
  
    <EditText  
        android:id="@+id/editTextTextPersonName"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:ems="10"  
        android:inputType="textPersonName"  
        android:text=""  
        tools:layout\_editor\_absoluteX="123dp"  
        tools:layout\_editor\_absoluteY="315dp" />  
  
    <EditText  
        android:id="@+id/editTextTextPersonName2"  
        android:layout\_width="201dp"  
        android:layout\_height="25dp"  
        android:ems="10"  
        android:inputType="textPersonName"  
        android:text=""  
        tools:layout\_editor\_absoluteX="123dp"  
        tools:layout\_editor\_absoluteY="383dp" />  
  
    <EditText  
        android:id="@+id/editTextTextPersonName3"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:ems="10"  
        android:inputType="textPersonName"  
        android:text=""  
        tools:layout\_editor\_absoluteX="123dp"  
        tools:layout\_editor\_absoluteY="410dp" />  
  
    <TextView  
        android:id="@+id/textView8"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:text="Language"  
        android:textColor="@color/black"  
        android:textSize="20"  
        tools:layout\_editor\_absoluteX="29dp"  
        tools:layout\_editor\_absoluteY="474dp" />  
  
    <EditText  
        android:id="@+id/editTextTextPersonName4"  
        android:layout\_width="202dp"  
        android:layout\_height="40dp"  
        android:ems="10"  
        android:inputType="textPersonName"  
        android:text=""  
        tools:layout\_editor\_absoluteX="131dp"  
        tools:layout\_editor\_absoluteY="467dp" />  
  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**Output**

****

**EXPERIMENT:5**

**AIM:**

Create a facebook page using relative layout. Implement validation on UI controls.

**SOURCE CODE:**

&lt;?xml version=&quot;1.0&quot; encoding=&quot;utf-8&quot;?&gt;

&lt;LinearLayout

xmlns:android=&quot;http://schemas.android.com/apk/res/android&quot;

android:layout\_width=&quot;match\_parent&quot;

android:layout\_height=&quot;match\_parent&quot;

android:background=&quot;#3b5998&quot;

android:orientation=&quot;vertical&quot;&gt;

&lt;!--Imageview for Facebook logo image--&gt;

&lt;ImageView

android:layout\_width=&quot;125dp&quot;

android:layout\_height=&quot;72dp&quot;

android:layout\_gravity=&quot;center&quot;

android:layout\_marginTop=&quot;80dp&quot;

android:src=&quot;@drawable/fb\_logo&quot; /&gt;

&lt;!--EditText for user name or email address--&gt;

&lt;EditText

android:layout\_width=&quot;match\_parent&quot;

android:layout\_height=&quot;wrap\_content&quot;

android:layout\_marginLeft=&quot;20dp&quot;

android:layout\_marginTop=&quot;80dp&quot;

android:layout\_marginRight=&quot;20dp&quot;

android:backgroundTint=&quot;#d3d3d3&quot;

android:hint=&quot;Username or Email&quot;

android:inputType=&quot;textEmailAddress&quot;

android:maxLines=&quot;1&quot;

android:padding=&quot;10dp&quot;

android:textColor=&quot;#ffffff&quot;

android:textColorHint=&quot;#d3d3d3&quot; /&gt;

&lt;!--EditText for user password--&gt;

&lt;EditText

android:layout\_width=&quot;match\_parent&quot;

android:layout\_height=&quot;wrap\_content&quot;

android:layout\_marginLeft=&quot;20dp&quot;

android:layout\_marginTop=&quot;10dp&quot;

android:layout\_marginRight=&quot;20dp&quot;

android:backgroundTint=&quot;#d3d3d3&quot;

android:hint=&quot;Password&quot;

android:inputType=&quot;textPassword&quot;

android:maxLines=&quot;1&quot;

android:padding=&quot;10dp&quot;

android:textColor=&quot;#ffffff&quot;

android:textColorHint=&quot;#d3d3d3&quot; /&gt;

&lt;!-- Login Button for Facebook Log In--&gt;

&lt;Button

android:id=&quot;@+id/btnLogin&quot;

android:layout\_width=&quot;match\_parent&quot;

android:layout\_height=&quot;wrap\_content&quot;

android:layout\_marginLeft=&quot;20dp&quot;

android:layout\_marginTop=&quot;35dp&quot;

android:layout\_marginRight=&quot;20dp&quot;

android:backgroundTint=&quot;#5c6bc0&quot;

android:padding=&quot;10dp&quot;

android:text=&quot;Log In&quot;

android:textColor=&quot;#ffffff&quot;

android:textSize=&quot;16sp&quot;

android:textStyle=&quot;bold&quot; /&gt;

&lt;RelativeLayout

android:layout\_width=&quot;match\_parent&quot;

android:layout\_height=&quot;match\_parent&quot;&gt;

&lt;LinearLayout

android:layout\_width=&quot;match\_parent&quot;

android:layout\_height=&quot;wrap\_content&quot;

android:layout\_alignParentBottom=&quot;true&quot;

android:orientation=&quot;vertical&quot;&gt;

&lt;TextView

android:id=&quot;@+id/txtSignUp&quot;

android:layout\_width=&quot;wrap\_content&quot;

android:layout\_height=&quot;wrap\_content&quot;

android:layout\_gravity=&quot;center\_horizontal&quot;

android:text=&quot;Sign Up for Facebook&quot;

android:textColor=&quot;#ffffff&quot; /&gt;

&lt;TextView

android:id=&quot;@+id/txtForgotPassword&quot;

android:layout\_width=&quot;wrap\_content&quot;

android:layout\_height=&quot;wrap\_content&quot;

android:layout\_gravity=&quot;center\_horizontal&quot;

android:layout\_marginTop=&quot;15dp&quot;

android:layout\_marginBottom=&quot;15dp&quot;

android:text=&quot;Forgot Password?&quot;

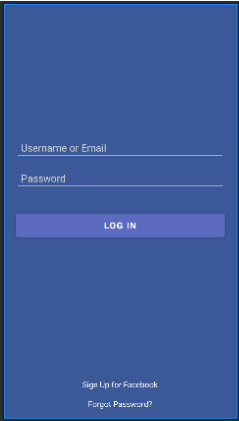
android:textColor=&quot;#ffffff&quot; /&gt;

&lt;/LinearLayout&gt;

&lt;/RelativeLayout&gt;

&lt;/LinearLayout&gt;

**OUTPUT:**

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