**Mobile Application Development**

* **Practical 4: Layout**

**CODE:**

**linearactivity.xml**

*<?***xml version="1.0" encoding="utf-8"***?>*<**LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 android:orientation="vertical"**>  
  
 <**TextView  
 android:id="@+id/textView"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.317"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.043"  
 android:layout\_width="125dp"  
 android:layout\_height="48dp"  
 android:backgroundTint="@android:color/holo\_blue\_light"  
 android:fontFamily="@font/allura"  
 android:text="Login"  
 android:textColor="@android:color/holo\_red\_light"  
 android:textColorHighlight="@color/design\_default\_color\_error"  
 android:textSize="34sp"  
 android:layout\_margin="20dp"**/>  
  
 <**EditText  
 android:id="@+id/user"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:backgroundTint="@color/design\_default\_color\_error"  
 android:ems="10"  
 android:fontFamily="@font/allura"  
 android:hint="Enter Name"  
 android:inputType="textPersonName"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.298"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView"  
 app:layout\_constraintVertical\_bias="0.103"  
 android:layout\_margin="20dp"**/>  
  
 <**EditText  
 android:id="@+id/pass"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:backgroundTint="@color/design\_default\_color\_error"  
 android:ems="10"  
 android:fontFamily="@font/allura"  
 android:hint="Password"  
 android:inputType="textPassword"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.298"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/user"  
 app:layout\_constraintVertical\_bias="0.103"  
 android:layout\_margin="20dp"**/>  
  
 <**CheckBox  
 android:id="@+id/checkBox"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:fontFamily="@font/allura"  
 android:text="Show Password"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.215"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/pass"  
 app:layout\_constraintVertical\_bias="0.092"  
 android:layout\_margin="20dp"**/>  
  
 <**Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:backgroundTint="?android:attr/colorActivatedHighlight"  
 android:fontFamily="@font/allura"  
 android:text="Show Details"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.392"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/checkBox"  
 app:layout\_constraintVertical\_bias="0.158"  
 android:layout\_margin="20dp"**/>  
  
 <**TextView  
 android:id="@+id/output"  
 android:layout\_width="334dp"  
 android:layout\_height="121dp"  
 android:fontFamily="@font/allura"  
 android:textSize="20sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.413"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/button"  
 app:layout\_constraintVertical\_bias="0.458"  
 android:layout\_margin="20dp"**/>  
  
</**LinearLayout**>

**Relativeactivity.xml**

*<?***xml version="1.0" encoding="utf-8"***?>*<**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 xmlns:app="http://schemas.android.com/apk/res-auto"**>  
  
 <**TextView  
 android:id="@+id/textView"  
 android:layout\_width="125dp"  
 android:layout\_height="48dp"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentTop="true"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginStart="20dp"  
 android:layout\_marginTop="20dp"  
 android:layout\_marginEnd="266dp"  
 android:layout\_marginBottom="663dp"  
 android:backgroundTint="@android:color/holo\_blue\_light"  
 android:fontFamily="@font/allura"  
 android:text="Login"  
 android:textColor="@android:color/holo\_red\_light"  
 android:textColorHighlight="@color/design\_default\_color\_error"  
 android:textSize="34sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.317"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.043"** />  
  
  
 <**EditText  
 android:id="@+id/user"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentTop="true"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginStart="20dp"  
 android:layout\_marginTop="99dp"  
 android:layout\_marginEnd="167dp"  
 android:layout\_marginBottom="588dp"  
 android:backgroundTint="@color/design\_default\_color\_error"  
 android:ems="10"  
 android:fontFamily="@font/allura"  
 android:hint="Enter Name"  
 android:inputType="textPersonName"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.298"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView"  
 app:layout\_constraintVertical\_bias="0.103"** />  
  
 <**EditText  
 android:id="@+id/pass"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentTop="true"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginStart="22dp"  
 android:layout\_marginTop="179dp"  
 android:layout\_marginEnd="165dp"  
 android:layout\_marginBottom="509dp"  
 android:backgroundTint="@color/design\_default\_color\_error"  
 android:ems="10"  
 android:fontFamily="@font/allura"  
 android:hint="Password"  
 android:inputType="textPassword"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.298"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/user"  
 app:layout\_constraintVertical\_bias="0.103"** />  
  
 <**CheckBox  
 android:id="@+id/checkBox"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentTop="true"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginStart="24dp"  
 android:layout\_marginTop="255dp"  
 android:layout\_marginEnd="280dp"  
 android:layout\_marginBottom="428dp"  
 android:fontFamily="@font/allura"  
 android:text="Show Password"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.215"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/pass"  
 app:layout\_constraintVertical\_bias="0.092"** />  
  
 <**Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentTop="true"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginStart="24dp"  
 android:layout\_marginTop="362dp"  
 android:layout\_marginEnd="233dp"  
 android:layout\_marginBottom="321dp"  
 android:backgroundTint="?android:attr/colorActivatedHighlight"  
 android:fontFamily="@font/allura"  
 android:text="Show Details"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.392"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/checkBox"  
 app:layout\_constraintVertical\_bias="0.158"** />  
  
 <**TextView  
 android:id="@+id/output"  
 android:layout\_width="334dp"  
 android:layout\_height="121dp"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentTop="true"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginStart="27dp"  
 android:layout\_marginTop="467dp"  
 android:layout\_marginEnd="50dp"  
 android:layout\_marginBottom="142dp"  
 android:fontFamily="@font/allura"  
 android:textSize="20sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.413"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/button"  
 app:layout\_constraintVertical\_bias="0.458"** />  
</**RelativeLayout**>

**Tableactivity.xml**

*<?***xml version="1.0" encoding="utf-8"***?>*<**TableLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 xmlns:app="http://schemas.android.com/apk/res-auto"**>  
  
  
 <**TableRow  
 android:layout\_width="fill\_parent"  
 android:layout\_height="fill\_parent"**>  
  
 <**TextView  
 android:id="@+id/textView"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.317"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.043"  
 android:layout\_width="125dp"  
 android:layout\_height="48dp"  
 android:backgroundTint="@android:color/holo\_blue\_light"  
 android:fontFamily="@font/allura"  
 android:text="Login"  
 android:textColor="@android:color/holo\_red\_light"  
 android:textColorHighlight="@color/design\_default\_color\_error"  
 android:textSize="34sp"  
 android:layout\_margin="20dp"**/>  
 </**TableRow**>  
  
 <**TableRow  
 android:layout\_width="fill\_parent"  
 android:layout\_height="fill\_parent"**>  
  
 <**EditText  
 android:id="@+id/user"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:backgroundTint="@color/design\_default\_color\_error"  
 android:ems="10"  
 android:fontFamily="@font/allura"  
 android:hint="Enter Name"  
 android:inputType="textPersonName"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.298"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView"  
 app:layout\_constraintVertical\_bias="0.103"  
 android:layout\_margin="20dp"**/>  
 </**TableRow**>  
  
 <**TableRow  
 android:layout\_width="fill\_parent"  
 android:layout\_height="fill\_parent"**>  
 <**EditText  
 android:id="@+id/pass"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:backgroundTint="@color/design\_default\_color\_error"  
 android:ems="10"  
 android:fontFamily="@font/allura"  
 android:hint="Password"  
 android:inputType="textPassword"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.298"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/user"  
 app:layout\_constraintVertical\_bias="0.103"  
 android:layout\_margin="20dp"**/>  
 </**TableRow**>  
  
 <**TableRow  
 android:layout\_width="fill\_parent"  
 android:layout\_height="fill\_parent"**>  
 <**CheckBox  
 android:id="@+id/checkBox"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:fontFamily="@font/allura"  
 android:text="Show Password"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.215"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/pass"  
 app:layout\_constraintVertical\_bias="0.092"  
 android:layout\_margin="20dp"**/>  
  
 </**TableRow**>  
  
 <**TableRow  
 android:layout\_width="fill\_parent"  
 android:layout\_height="fill\_parent"**>  
 <**Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:backgroundTint="?android:attr/colorActivatedHighlight"  
 android:fontFamily="@font/allura"  
 android:text="Show Details"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.392"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/checkBox"  
 app:layout\_constraintVertical\_bias="0.158"  
 android:layout\_margin="20dp"**/>  
 </**TableRow**>  
  
 <**TableRow  
 android:layout\_width="fill\_parent"  
 android:layout\_height="fill\_parent"**>  
 <**TextView  
 android:id="@+id/output"  
 android:layout\_width="334dp"  
 android:layout\_height="121dp"  
 android:fontFamily="@font/allura"  
 android:textSize="20sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.413"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/button"  
 app:layout\_constraintVertical\_bias="0.458"  
 android:layout\_margin="20dp"**/>  
 </**TableRow**>  
  
</**TableLayout**>

**Output**

   