

# MOBILE APPLICATION DEVELOPMENT

## LAB RECORD STRUCTURE



1. Develop a program to implement frame layout, table layout and relative layout.
2. Develop a program to implement Text View and Edit Text.
3. Develop a program to implement Auto Complete Text View.
4. Develop a program to implement Button, Image Button and Toggle Button.
5. Develop a program to implement Progress Bar.
6. Develop a program to implement Custom Toast Alert.

<b>ExpNo: 1</b>	<b>Develop a program to implement frame layout, table layout and relative layout.</b>

**AIM:** To develop a program to implement frame layout, table layout and relative layout.

**PROGRAM:**

**activity\_main.xml**

```
<?xml version="1.0" encoding="utf-8"?>
<FrameLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <!-- RelativeLayout Section -->
    <RelativeLayout
        android:layout_width="match_parent"
        android:layout_height="300dp"
        android:background="#FFCDD2"
        android:padding="16dp">

        <TextView
            android:id="@+id/textView"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_centerHorizontal="true"
            android:text="Welcome to
            RelativeLayout" android:textSize="18sp"
        />

        <EditText
            android:id="@+id/editTextInput"
            android:layout_width="match_parent"
```

```

    android:layout_height="wrap_content"
    android:layout_below="@id/textView"
    android:layout_marginTop="16dp"
    android:hint="Enter some text"
    android:inputType="text" />

```

```
<Button
```

```

    android:id="@+id/buttonSubmit"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/editTextInput"
    android:layout_marginTop="16dp"
    android:text="Submit" />

```

```
<TextView
```

```

    android:id="@+id/textViewOutput"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_below="@id/buttonSubmit"
    android:layout_marginTop="16dp"
    android:text="Your text will appear here"
    android:textSize="16sp"
    android:textColor="#000" />

```

```
</RelativeLayout>
```

```
<!-- TableLayout Section -->
```

```
<TableLayout
```

```

    android:layout_width="match_parent"
    android:layout_height="300dp"
    android:layout_gravity="center"
    android:background="#BBDEFB">

```

```
<TableRow>
```

```
<Button
```

```

    android:layout_width="wrap_content"

```

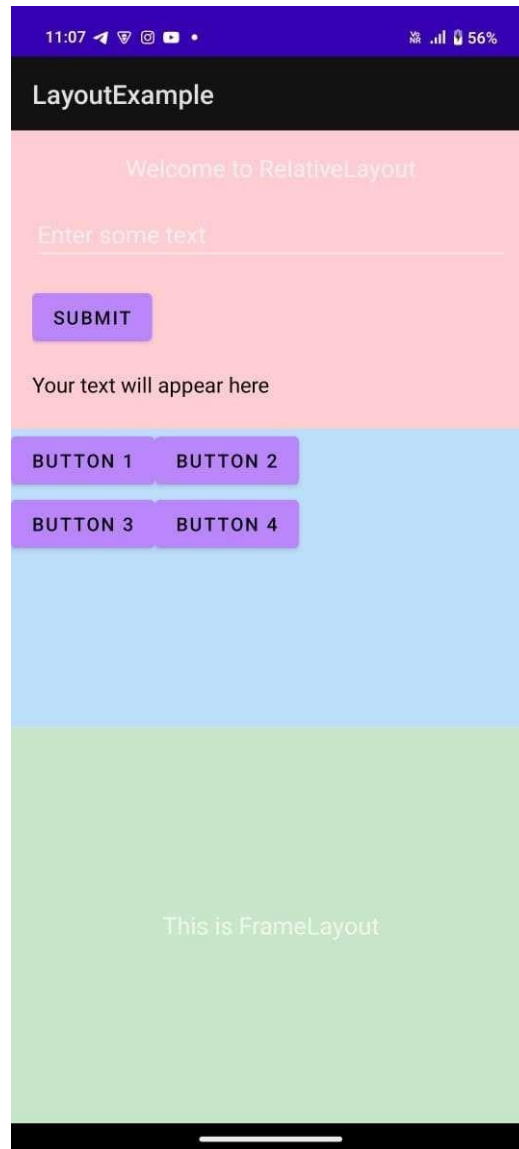
```
        android:layout_height="wrap_content"
        android:text="Button 1" />
    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Button 2" />
</TableRow>

<TableRow>
    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Button 3" />
    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Button 4" />
</TableRow>
</TableLayout>

<!-- FrameLayout Section -->
<FrameLayout
    android:layout_width="match_parent"
    android:layout_height="300dp"
    android:layout_gravity="bottom"
    android:background="#C8E6C9">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="This is FrameLayout"
        android:textSize="18sp"
        android:layout_gravity="center" />
</FrameLayout>

</FrameLayout>
```

**OUTPUT:****RESULT:**

Thus, the program to implement frame layout, table layout and relative layout was executed successfully.

<b>ExpNo: 2</b>	<b>Develop a program to implement Text View and Edit Text.</b>

**AIM:** To develop a program to implement Text View and Edit Text.

## **PROGRAM:**

### **activity\_main.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"
    android:orientation="vertical"
    android:padding="16dp">

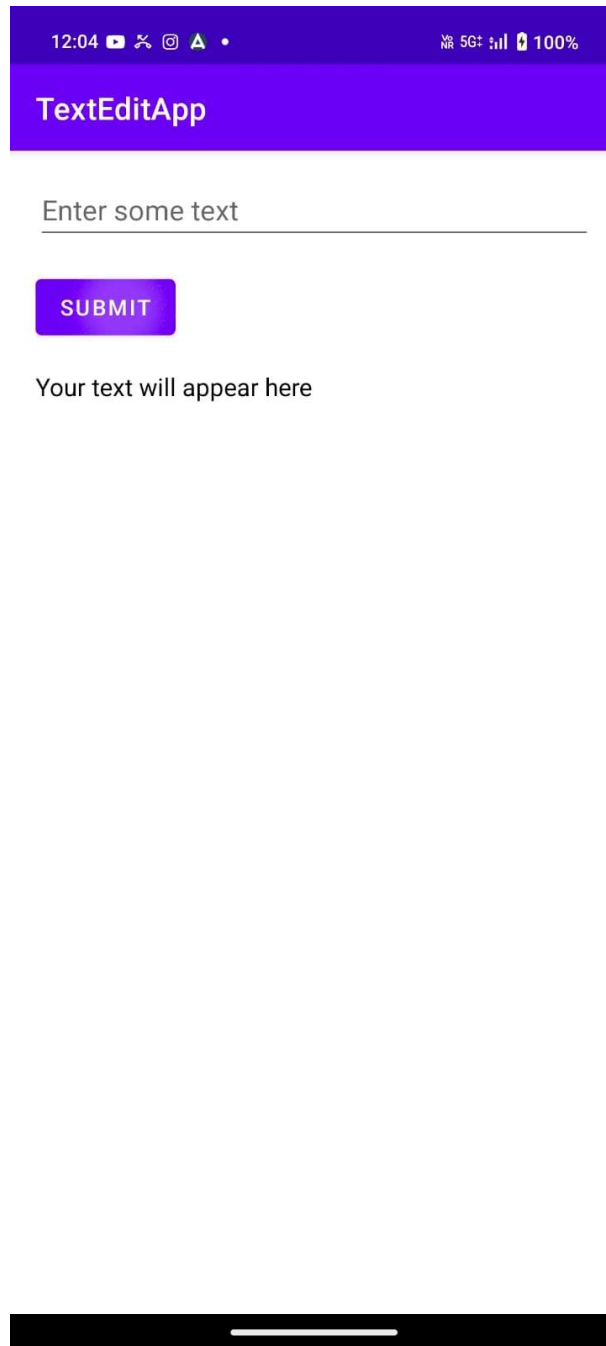
    <!-- EditText for user input -->
    <EditText
        android:id="@+id/editTextInput"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        " android:hint="Enter some text"
        android:inputType="text" />

    <!-- Button to display the text -->
    <Button
        android:id="@+id/buttonSubmit"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        " android:layout_marginTop="16dp"
        android:text="Submit" />

    <!-- TextView to display the entered text -->
    <TextView
```

```
android:id="@+id/textViewOutput"  
android:layout_width="match_parent"  
android:layout_height="wrap_content"  
android:layout_marginTop="16dp"  
android:text="Your text will appear here"  
android:textSize="16sp"  
android:textColor="#000" />
```

```
</LinearLayout>
```

**OUTPUT:****RESULT:**

Thus, the program to implement Text View and Edit Text was executed successfully.



<b>ExpNo: 3</b>	<b>Develop a program to implement Auto Complete Text View.</b>

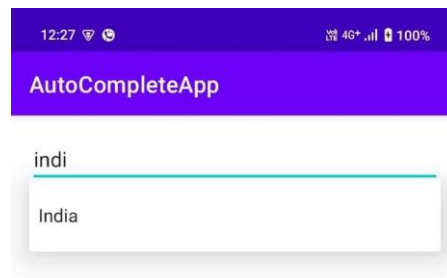
**AIM:** To develop a program to implement Auto Complete Text View.

**PROGRAM:**

**activity\_main.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">

    <AutoCompleteTextView
        android:id="@+id/autoCompleteTextView"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Type a country"
        android:layout_margin="16dp"
        android:completionThreshold="1" />
</RelativeLayout>
```

**OUTPUT:****RESULT:**

Thus, the program to implement Auto Complete Text View was executed successfully.

<b>ExpNo: 4</b>	<b>Develop a program to implement Button, Image Button and Toggle Button.</b>
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**AIM:** to Develop a program to implement Button, Image Button and Toggle Button.

**PROGRAM:**

**activity\_main.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"
    android:orientation="vertical"
    android:gravity="center"
    android:padding="16dp">

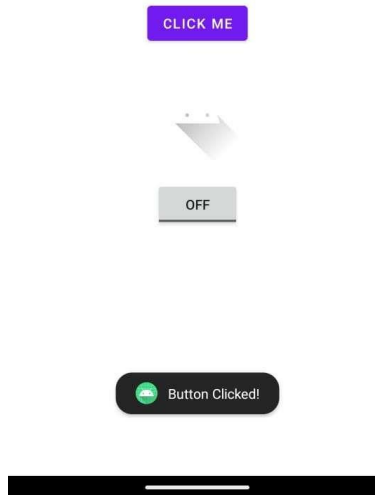
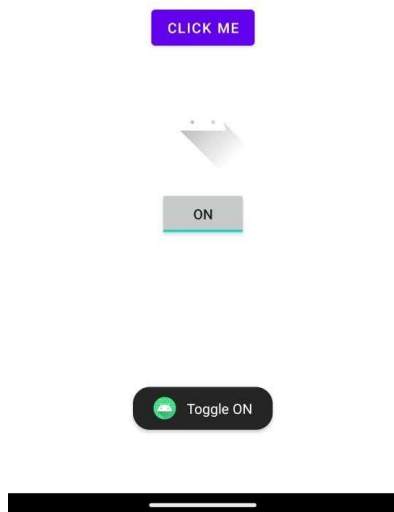
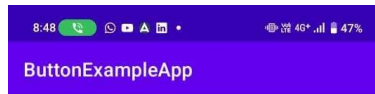
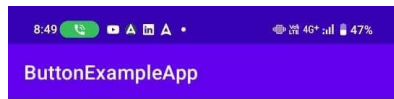
    <!-- Normal Button -->
    <Button
        android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Click Me"
        android:layout_marginBottom="16dp" />

    <!-- Image Button -->
    <ImageButton
        android:id="@+id/imageButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        "
        android:src="@drawable/ic_launcher_foreground"
        android:contentDescription="Image Button"
        android:background="?attr/selectableItemBackground"
        android:layout_marginBottom="16dp" />
```

```
<!-- Toggle Button -->
<ToggleButton
    android:id="@+id/toggleButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    " android:textOn="ON"
    android:textOff="OFF" />

</LinearLayout>
```

## OUTPUT:



**RESULT:**

Thus, the program to implement Button, Image Button and Toggle Button was executed successfully.

<b>ExpNo: 5</b>	<b>Develop a program to implement Progress Bar.</b>
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**AIM:** To develop a program to implement Progress Bar.

**PROGRAM:**

**activity\_main.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"
    android:orientation="vertical"
    android:padding="16dp">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Progress Bar Example"
        android:textSize="18sp"
        android:layout_marginBottom="16dp" />

    <!-- Indeterminate Progress Bar -->
    <ProgressBar
        android:id="@+id/indeterminateProgressBar"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:indeterminate="true"
        android:layout_marginBottom="16dp" />

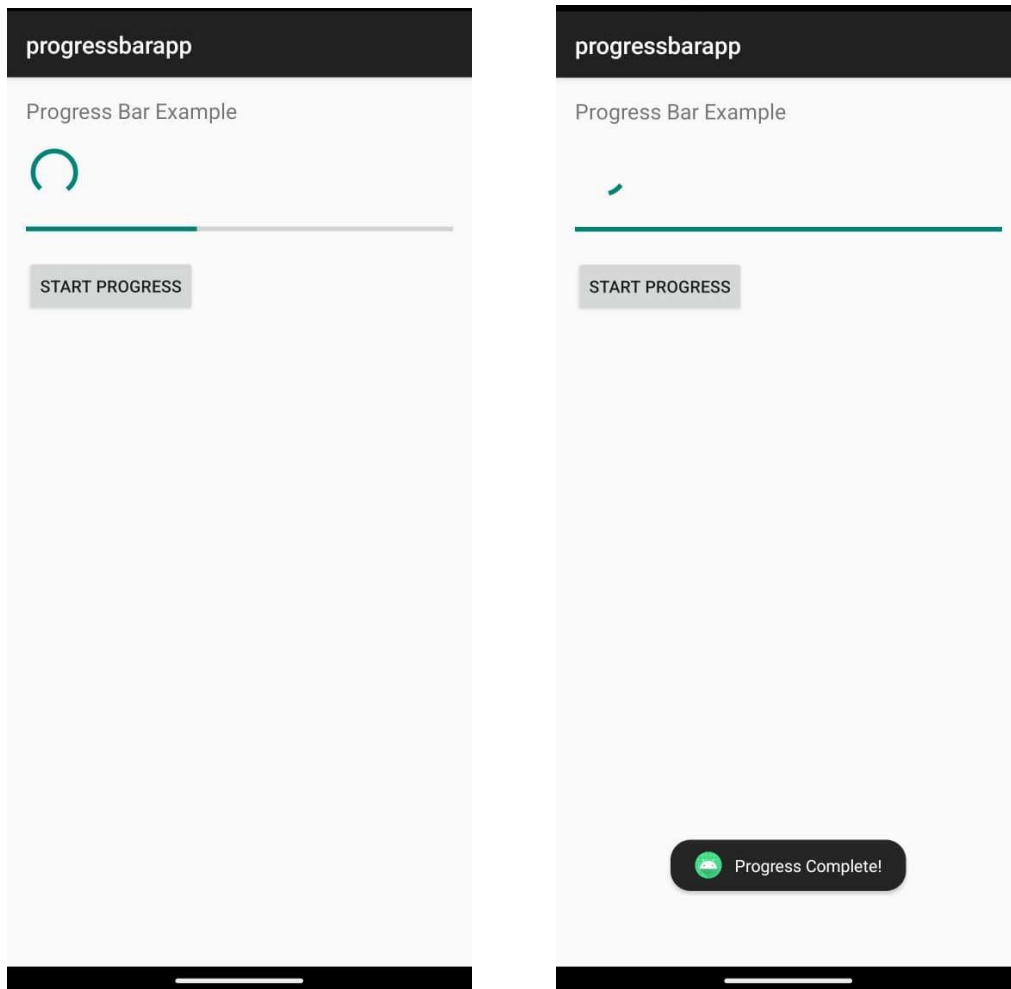
    <!-- Determinate Progress Bar -->
    <ProgressBar
        android:id="@+id/determinateProgressBar"
        style="?android:attr/progressBarStyleHorizontal"
        android:layout_width="match_parent"
```

```
    android:layout_height="wrap_content"
    "
    android:layout_marginBottom="16dp"
    android:progress="0"
    android:max="100" />
```

```
<Button
    android:id="@+id/startButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    " android:text="Start Progress" />
```

```
</LinearLayout>
```



**OUTPUT:****Result:**

Thus, the program to implement Progress Bar was executed successfully

