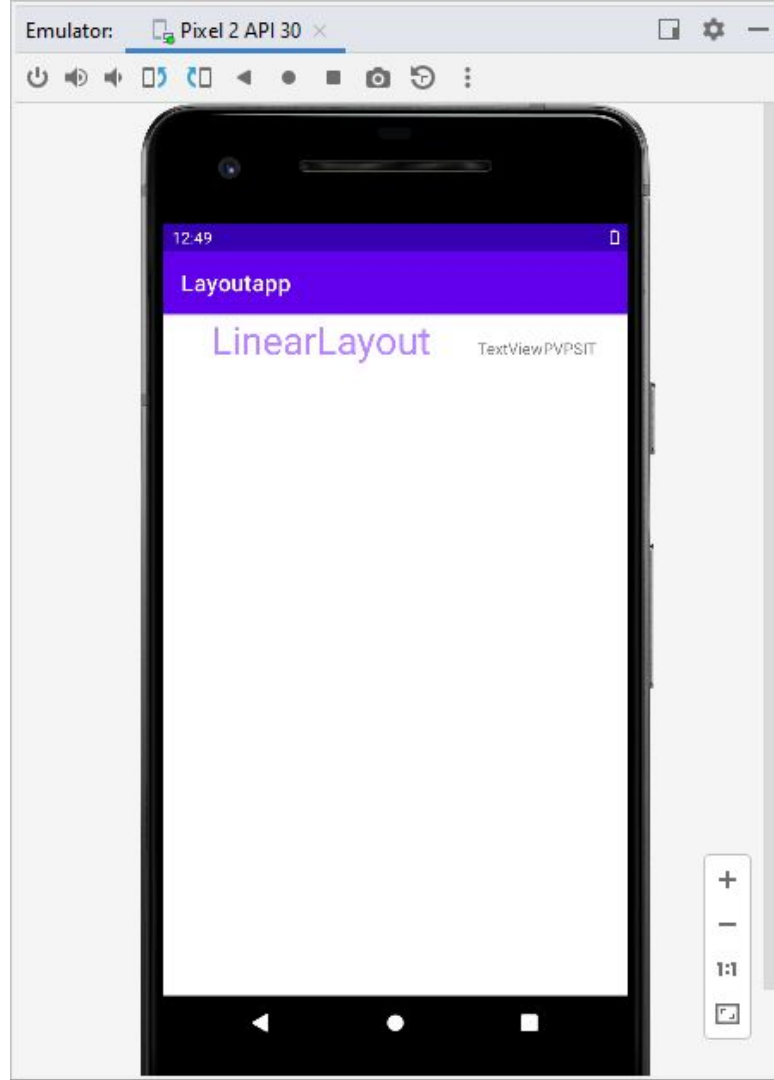
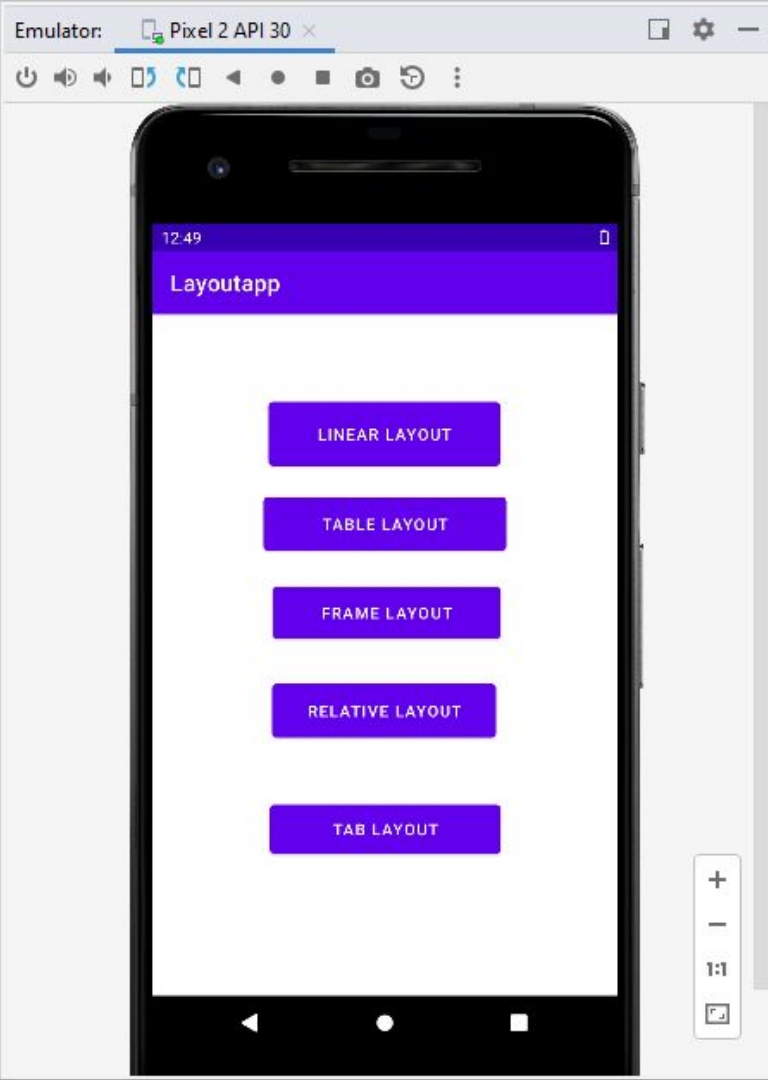


Build mobile application using different layouts

Experiment - 2



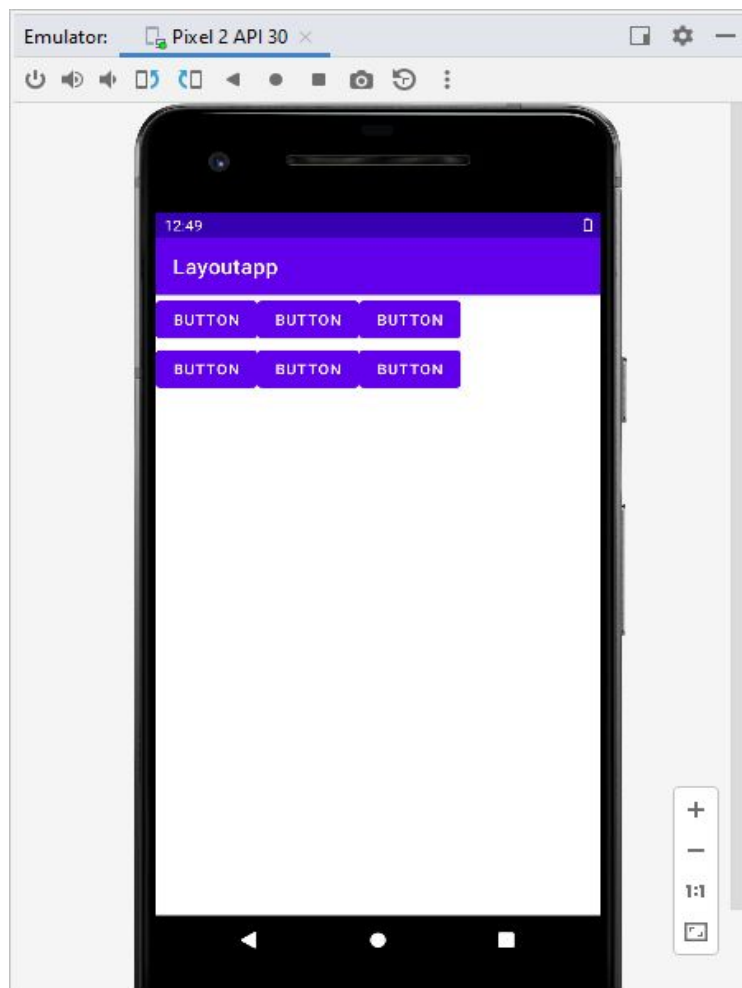
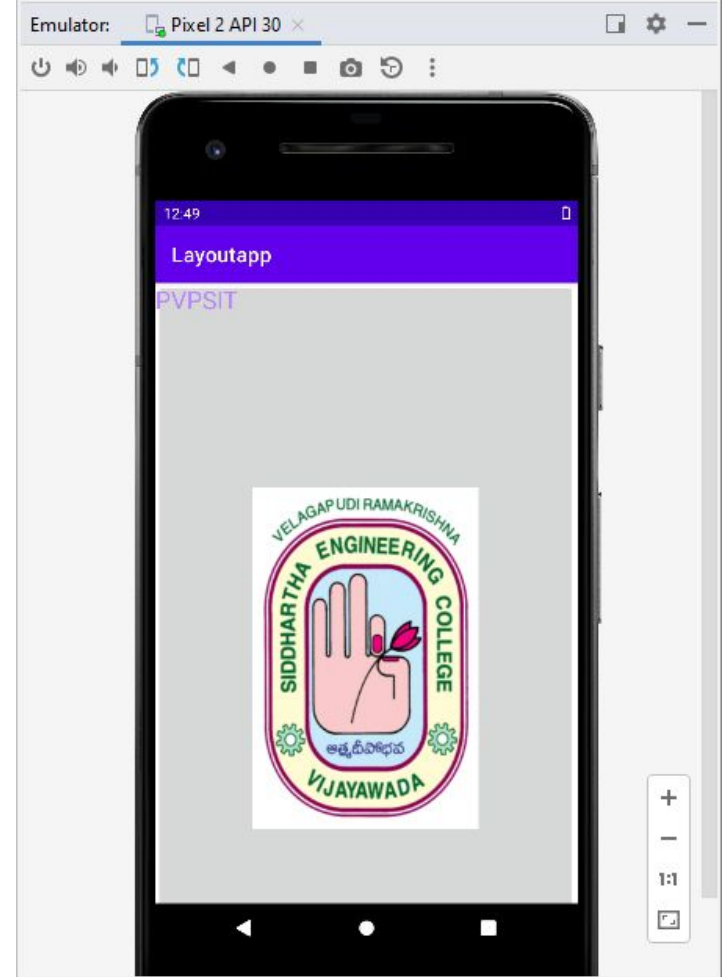
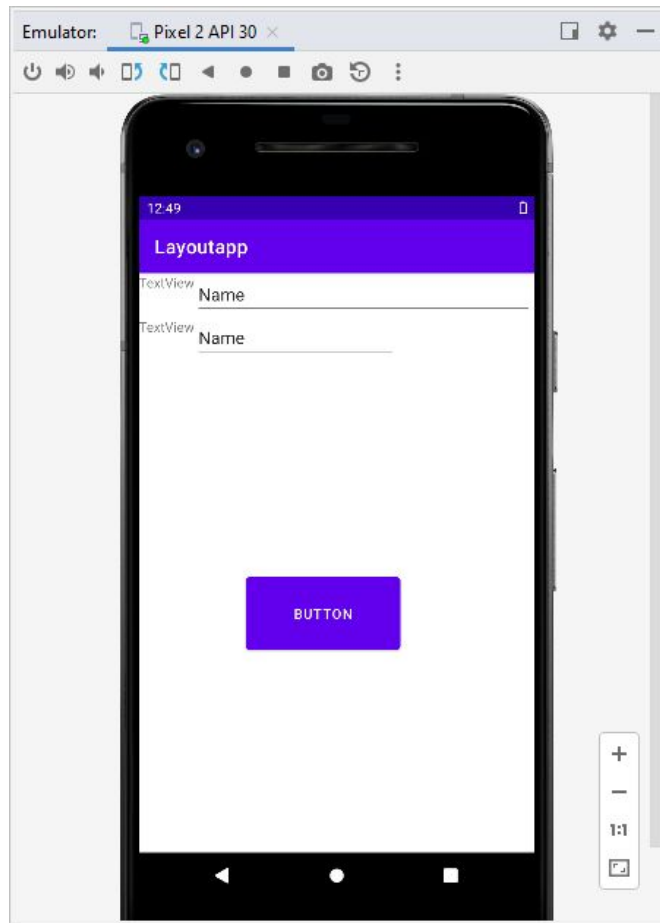


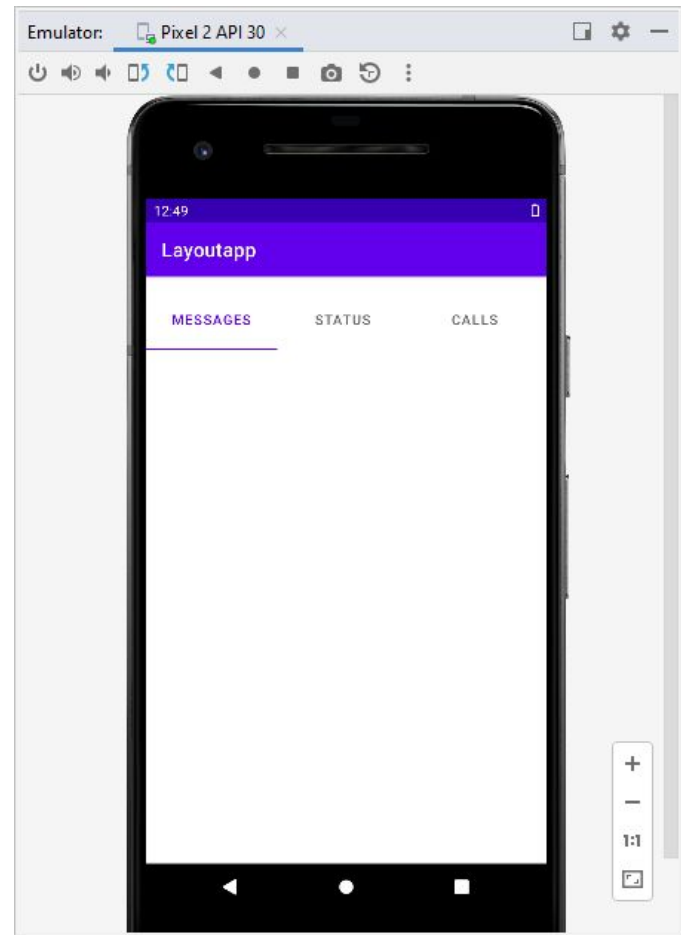
Table Layout



Frame Layout



Relative Layout



Tab Layout

MainActivity

```
public class MainActivity extends AppCompatActivity {  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_main);  
    }  
  
    public void onclick_btn_ll(View v)  
    {  
        Intent i=new Intent( packageContext: this,LinearLayoutActivity.class);  
        this.startActivity(i);  
    }  
  
    public void onclick_btn_tl(View v)  
    {  
        Intent i=new Intent( packageContext: this,CalActivity.class);  
        this.startActivity(i);  
    }  
  
    public void onclick_btn_fl(View v)  
    {  
        Intent i=new Intent( packageContext: this,FrameActivity.class);  
        this.startActivity(i);  
    }  
  
    public void onclick_btn_rl(View v)  
    {  
        Intent i=new Intent( packageContext: this,RelativeActivity.class);  
        this.startActivity(i);  
    }  
  
    public void onclick_btn_tabl(View v)  
    {  
        Intent i=new Intent( packageContext: this,TabActivity.class);  
        this.startActivity(i);  
    }  
}
```

Linear Layout

```
<?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"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
    <TextView
        android:id="@+id/textView"
        android:layout_width="279dp"
        android:layout_height="68dp"
        android:text="LinearLayout"
        android:textAlignment="center"
        android:textColor="@color/purple_200"
        android:textSize="34sp" />
    <TextView
        android:id="@+id/textView4"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="TextView" />
    <TextView
        android:id="@+id/textView3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="PVPSIT" />
</LinearLayout>
```

Table Layout

```
<?xml version="1.0" encoding="utf-8"?>
<TableLayout
    android:layout_width="302dp" xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_height="306dp" xmlns:app="http://schemas.android.com/apk/res-auto"
    app:layout_constraintBottom_toBottomOf="parent" xmlns:tools="http://schemas.android.com/tools"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" tools:context=".CalActivity">
    <TableRow>
        android:layout_width="match_parent"
        android:layout_height="match_parent">
        <Button...>
        <Button...>
        <Button...>
    </TableRow>
    <TableRow>
        android:layout_width="match_parent"
        android:layout_height="match_parent">
        <Button...>
        <Button...>
        <Button...>
    </TableRow>
</TableLayout>
```

FrameLayout

- Android FrameLayout is a subclass of ViewGroup that **displays a single view on the screen** by blocking a specific area.
- Views added to a FrameLayout are always **anchored to the top left of the layout**.
- Multiple views can be added to a FrameLayout, but each will be stacked on top of the previous one.
- FrameLayout should generally be used to hold a **single child view**.

Frame Layout

```
<?xml version="1.0" encoding="utf-8"?>
<FrameLayout 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="409dp"
    android:layout_height="729dp"
    tools:layout_editor_absoluteX="1dp"
    tools:layout_editor_absoluteY="1dp">

    <ImageButton
        android:id="@+id/imageButton"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        app:srcCompat="@drawable/img" />

    <TextView
        android:id="@+id/textView2"
        android:layout_width="match_parent"
        android:layout_height="98dp"
        android:text="PVPSIT"
        android:textColor="@color/purple_200"
        android:textDirection="firstStrong"
        android:textSize="24sp" />

</FrameLayout>
```

Relative Layout

```
1 <?xml version="1.0" encoding="utf-8"?>
2 <RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
3     xmlns:app="http://schemas.android.com/apk/res-auto"
4     xmlns:tools="http://schemas.android.com/tools"
5     android:layout_width="409dp"
6     android:layout_height="729dp"
7     tools:layout_editor_absoluteX="1dp"
8     tools:layout_editor_absoluteY="1dp">
9
10    <Button
11        android:id="@+id/button"
12        android:layout_width="161dp"
13        android:layout_height="87dp"
14        android:layout_alignParentStart="true"
15        android:layout_alignParentTop="true"
16        android:layout_alignParentEnd="true"
17        android:layout_alignParentBottom="true"
18        android:layout_centerInParent="true"
19        android:layout_marginStart="111dp"
20        android:layout_marginTop="311dp"
21        android:layout_marginEnd="137dp"
22        android:layout_marginBottom="331dp"
23        android:text="Button" />
```

```
25 <TextView
26     android:id="@+id/textView8"
27     android:layout_width="wrap_content"
28     android:layout_height="46dp"
29     android:layout_alignParentStart="true"
30     android:layout_alignParentLeft="true"
31     android:text="TextView" />
32
33 <EditText
34     android:id="@+id/editTextTextPersonName"
35     android:layout_width="wrap_content"
36     android:layout_height="wrap_content"
37     android:layout_alignParentTop="true"
38     android:layout_alignParentRight="true"
39     android:layout_toEndOf="@id/textView8"
40     android:ems="10"
41     android:inputType="textPersonName"
42     android:text="Name" />
43
44 <TextView
45     android:id="@+id/textView9"
46     android:layout_width="wrap_content"
47     android:layout_height="45dp"
48     android:layout_below="@id/textView8"
49     android:text="TextView" />
```

Relative Layout

```
51 <EditText
52     android:id="@+id/editTextTextPersonName2"
53     android:layout_width="wrap_content"
54     android:layout_height="wrap_content"
55     android:layout_below="@id/editTextTextPersonName"
56     android:layout_toEndOf="@id/textView9"
57     android:ems="10"
58     android:inputType="textPersonName"
59     android:text="Name" />
60
61 </RelativeLayout>
```

Tab Layout

```
<?xml version="1.0" encoding="utf-8"?>
<com.google.android.material.tabs.TabLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:id="@+id/tabLayout" xmlns:app="http://schemas.android.com/apk/res-auto"
    android:layout_width="405dp" xmlns:tools="http://schemas.android.com/tools"
    android:layout_height="63dp"
    app:layout_constraintBottom_toBottomOf="parent" app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.023"
    tools:layout_editor_absoluteX="5dp" tools:context=".TabActivity">
    <com.google.android.material.tabs.TabItem
        android:id="@+id/tabitem_messages"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Messages" />
    <com.google.android.material.tabs.TabItem
        android:id="@+id/tabitem_status"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Status" />
    <com.google.android.material.tabs.TabItem
        android:id="@+id/tabitem_calls"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Calls" />
</com.google.android.material.tabs.TabLayout>
```