Practical No. 2

Aim: Write an Android program to demonstrate different Layouts.

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout android:layout_height="match_parent"</pre>
  android:layout width="match parent"
  android:orientation="vertical"
  android:gravity="center"
  xmlns:android="http://schemas.android.com/apk/res/android" >
  <Button
    android:id="@+id/btnlh"
    android:layout_width="wrap_content"
    android:layout height="wrap content"
    android:text="Linear Layout Horizontal" />
  <Button
    android:id="@+id/btnlv"
    android:layout_width="wrap_content"
    android:layout height="wrap content"
    android:text="Linear Layout Vertical" />
  <Button
    android:id="@+id/btnr"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:text="Relative Layout"/>
</LinearLavout>
activity_main2.xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout android:layout_height="match_parent"</pre>
  android:layout_width="match_parent"
  android:orientation="vertical"
  android:gravity="center"
  xmlns:android="http://schemas.android.com/apk/res/android" >
  <Button
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:text="Button1"/>
  <Button
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:text="Button2" />
  <Button
    android:layout width="wrap content"
    android:layout_height="wrap_content"
    android:text="Button3" />
```

```
<Button
    android:layout_width="wrap_content"
    android:layout height="wrap content"
    android:text="Button4"/>
  <Button
    android:layout width="wrap content"
    android:layout_height="wrap_content"
    android:text="Button5" />
</LinearLayout>
activity_main3.xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout android:layout height="match_parent"</p>
  android:layout width="match parent"
  android:gravity="center"
  xmlns:android="http://schemas.android.com/apk/res/android" >
  <Button
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:text="Button1"/>
  <Button
    android:layout_width="wrap_content"
    android:layout height="wrap content"
    android:text="Button2"/>
  <Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Button3" />
  <Button
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:text="Button4"/>
</LinearLayout>
activity_main4.xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout android:layout_height="match_parent"
  android:layout_width="match_parent"
  xmlns:android="http://schemas.android.com/apk/res/android" >
  <Button
    android:id="@+id/btn1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Button1"
    android:layout_alignParentRight="true" />
  <Button
    android:id="@+id/btn2"
    android:layout_width="wrap_content"
```

```
android:layout_height="wrap_content"
  android:text="Button2"
  android:layout_alignParentRight="true"
  android:layout_alignParentBottom="true" />
<Button
  android:id="@+id/btn3"
  android:layout_width="wrap_content"
  android:layout height="wrap content"
  android:text="Button3"/>
<Button
  android:id="@+id/btn4"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:text="Button4"
  android:layout_alignParentBottom="true" />
<Button
  android:id="@+id/btn5"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:text="Button5"
  android:layout centerHorizontal="true" />
<Button
  android:id="@+id/btn6"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:text="Button6"
  android:layout_centerVertical="true" />
<Button
  android:id="@+id/btn7"
  android:layout_width="wrap_content"
  android:layout height="wrap content"
  android:text="Button7"
  android:layout centerInParent="true"/>
<Button
  android:id="@+id/btn8"
  android:layout width="wrap content"
  android:layout height="wrap content"
  android:text="Button8"
  android:layout toRightOf="@+id/btn7"
  android:layout_centerInParent="true" />
<Button
  android:id="@+id/btn9"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:text="Button9"
  android:layout_above="@+id/btn7"
  android:layout_centerInParent="true" />
<Button
  android:id="@+id/btn10"
  android:layout_width="wrap_content"
  android:layout height="wrap content"
  android:text="Button10"
```

```
android:layout below="@+id/btn7"
    android:layout_centerInParent="true" />
  <Button
    android:id="@+id/btn11"
    android:layout_width="wrap_content"
    android:layout height="wrap content"
    android:text="Button11"
    android:layout_toRightOf="@+id/btn5"
    android:layout_below="@+id/btn5"/>
  <Button
    android:id="@+id/btn12"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Button12"
    android:layout toLeftOf="@+id/btn10"
    android:layout_below="@+id/btn10"/>
  <Button
    android:id="@+id/btn13"
    android:layout_width="wrap_content"
    android:layout height="wrap content"
    android:text="Button13"
    android:layout above="@+id/btn9"
    android:layout_alignParentRight="true" />
</RelativeLayout>
MainActivity.kt
package com.example.practicalno2
import android.content.Intent
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.widget.Button
class MainActivity : AppCompatActivity() {
  override fun onCreate(savedInstanceState: Bundle?) {
    super.onCreate(savedInstanceState)
    setContentView(R.layout.activity_main)
    val btnlh = findViewById<Button>(R.id.btnlh)
    val btnlv = findViewById < Button > (R.id.btnlv)
    val btnr = findViewById < Button > (R.id.btnr)
    btnlv.setOnClickListener {
       val intent = Intent(this, MainActivity2::class.java)
       startActivity(intent)
     }
```

```
btnlh.setOnClickListener {
    val intent = Intent(this, MainActivity3::class.java)
    startActivity(intent)
}

btnr.setOnClickListener {
    val intent = Intent(this, MainActivity4::class.java)
    startActivity(intent)
}
}
```

Output:







