



**Ganpat
University**

॥ विद्यया समाजोत्कर्षः ॥

**U.V. Patel
College of
Engineering**

**Department of Computer
Engineering/Information
Technology**

MainActivity.XML File:

```
<?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"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:visibility="visible"
    tools:context=".MainActivity">

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_weight="0.8"
        android:orientation="vertical">

        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:orientation="horizontal">

            <ImageView
                android:id="@+id/imageView"
                android:layout_width="match_parent"
                android:layout_height="200dp"
                app:srcCompat="@drawable/python_logo" />
            </LinearLayout>

            <androidx.cardview.widget.CardView
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:layout_marginHorizontal="20dp"
                app:cardBackgroundColor="@color/black"
                app:cardCornerRadius="10dp">

                <LinearLayout
                    android:layout_width="match_parent"
                    android:layout_height="wrap_content"
                    android:orientation="horizontal">

                    <ImageView
                        android:layout_width="100dp"
                        android:layout_height="100dp"
```

```
android:src="@drawable/ic_launcher_foreground" />
```

```
<LinearLayout
```

```
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:orientation="vertical">
```

```
    <TextView
```

```
        android:id="@+id/tv1"  
        android:layout_width="wrap_content"  
        android:layout_height="wrap_content"  
        android:text="Linear Layout"  
        android:textColor="@color/white"  
        android:textSize="24sp" />
```

```
    <TextView
```

```
        android:layout_width="wrap_content"  
        android:layout_height="wrap_content"  
        android:layout_marginTop="20dp"  
        android:text="This is my text view"  
        android:textColor="@color/white" />
```

```
</LinearLayout>
```

```
</LinearLayout>
```

```
</androidx.cardview.widget.CardView>
```

```
<androidx.cardview.widget.CardView
```

```
    android:layout_width="match_parent"  
    android:layout_height="275dp"  
    android:layout_marginHorizontal="20dp"  
    android:layout_marginTop="10dp"  
    android:layout_marginBottom="25dp"  
    app:cardBackgroundColor="@color/black"  
    app:cardCornerRadius="10dp">
```

```

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="vertical">

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal">

        <ImageView
            android:layout_width="100dp"
            android:layout_height="100dp"
            android:src="@drawable/ic_launcher_foreground" />

        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:orientation="vertical">

            <TextView
                android:id="@+id/tv2"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="Linear Layout"
                android:textColor="@color/white"
                android:textSize="24sp" />

            <TextView
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_marginTop="20dp"
                android:text="This is my text view"
                android:textColor="@color/white" />

        </LinearLayout>

    </LinearLayout>

</LinearLayout>
<View
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:src="@drawable/nature"
    android:background="@drawable/nature"
/>

```

```

        </LinearLayout>
    </androidx.cardview.widget.CardView>

    <com.google.android.material.bottomnavigation.BottomNavigationView
        android:id="@+id/bv23"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_weight="0.2"
        android:gravity="bottom"
        android:visibility="visible"
        app:labelVisibilityMode="auto"
        app:menu="@menu/menu" />

</LinearLayout>

</LinearLayout>

```

MainActivity.kt File:

```

package com.example.pr_6

import android.content.ClipData
import android.content.Intent
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.util.Log
import com.google.android.material.bottomnavigation.BottomNavigationView
//import android.R
//import androidx.annotation.NonNull

class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
    }
}

```



```
setContentView(R.layout.activity_main2)
```

```
val bottom:BottomNavigationView=findViewById(R.id.bv23)
```

```
bottom.setOnNavigationItemSelectedListener(BottomNavigationView.OnNavigationItemSelectedListener
```

```
{
```

```
    when(it.itemId){
```

```
        R.id.RL->
```

```
        {
```

```
            val intent = Intent(this@MainActivity,Relative_layout::class.java)
```

```
            startActivity(intent)
```

```
        }
```

```
        R.id.CS->
```

```
        {
```

```
            val intent = Intent(this@MainActivity,constrain_layout::class.java)
```

```
            startActivity(intent)
```

```
        }
```

```
    }
```

```
    return@OnNavigationItemSelectedListener true
```

```
}}
```

```
}
```

```
}
```

Relative_Layout.XML File:

```
<?xml version="1.0" encoding="utf-8"?>
```

```
<RelativeLayout 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="match_parent">
```

```
<ImageView
```

```
    android:id="@+id/imageView2"
```

```
    android:layout_width="match_parent"
```

```
    android:layout_height="200dp"
```

```
app:srcCompat="@drawable/python_logo" />
```

```
<androidx.cardview.widget.CardView
    android:id="@+id/CDV1"
    android:layout_below="@+id/imageView2"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginHorizontal="20dp"
    app:cardBackgroundColor="@color/black"
    app:cardCornerRadius="10dp">
```

```
<RelativeLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content">
```

```
<ImageView
    android:id="@+id/im3"
    android:layout_width="100dp"
    android:layout_height="100dp"
    android:src="@drawable/ic_launcher_foreground" />
```

```
<TextView
    android:id="@+id/tv1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="34dp"
    android:layout_toEndOf="@+id/im3"
    android:text="Relative Layout"
    android:textColor="@color/white"
    android:textSize="24sp" />
```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/tv1"
    android:layout_marginStart="33dp"
    android:layout_marginTop="21dp"
    android:layout_toEndOf="@+id/im3"
    android:text="This is my text view"
    android:textColor="@color/white" />
```

```
</RelativeLayout>
```

```
</androidx.cardview.widget.CardView>
```

```
<androidx.cardview.widget.CardView
    android:id="@+id/CDV2"
```

```
android:layout_width="match_parent"
android:layout_height="250dp"
android:layout_below="@+id/CDV1"
android:layout_marginHorizontal="20dp"
android:layout_marginTop="10dp"
app:cardBackgroundColor="@color/black"
app:cardCornerRadius="10dp">
```

<RelativeLayout

```
android:layout_width="match_parent"
android:layout_height="wrap_content">
```

<ImageView

```
android:id="@+id/im4"
android:layout_width="100dp"
android:layout_height="100dp"
android:src="@drawable/ic_launcher_foreground" />
```

<TextView

```
android:id="@+id/tv2"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginStart="34dp"
android:layout_toEndOf="@+id/im4"
android:text="Relative Layout"
android:textColor="@color/white"
android:textSize="24sp" />
```

<TextView

```
android:id="@+id/tv3"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_below="@+id/tv2"
android:layout_marginStart="33dp"
android:layout_marginTop="21dp"
android:layout_toEndOf="@+id/im4"
android:text="This is my text view"
android:textColor="@color/white" />
```

<View

```
android:layout_width="match_parent"
android:layout_height="match_parent"
android:layout_below="@+id/tv3"
android:background="@drawable/nature"
android:src="@drawable/nature"
android:layout_marginTop="20dp"/>
```



```

        </RelativeLayout>
    </androidx.cardview.widget.CardView>
<RelativeLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content">
    <com.google.android.material.bottomnavigation.BottomNavigationView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/bv1"
        android:layout_alignParentBottom="true"
        android:visibility="visible"
        app:labelVisibilityMode="auto"
        app:menu="@menu/menu" />
</RelativeLayout>
</RelativeLayout>

```

Relative_Layout.kt File:

```

package com.example.pr_6

import android.content.Intent
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import com.google.android.material.bottomnavigation.BottomNavigationView

class Relative_layout : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_relative_layout)

        val bottom: BottomNavigationView = findViewById(R.id.bv1)
        bottom.setOnNavigationItemSelectedListener(BottomNavigationView.OnNavigationItemSelectedListener)
    {

        when(it.itemId){

            R.id.LL->
            {
                val intent = Intent(this@Relative_layout,MainActivity::class.java)
                startActivity(intent)
            }
            R.id.CS->
            {
                val intent = Intent(this@Relative_layout,constrain_layout::class.java)
                startActivity(intent)
            }
        }
    }
}

```

```

    }

    return@OnNavigationItemSelectedListener true
})
}
}

```

Constraint_Layout.XML File:

```

<?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=".constrain_layout">

    <ImageView
        android:id="@+id/imageView2"
        android:layout_width="match_parent"
        android:layout_height="200dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:srcCompat="@drawable/python_logo" />

    <androidx.cardview.widget.CardView
        android:id="@+id/CDV1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginHorizontal="20dp"
        app:cardBackgroundColor="@color/black"
        app:cardCornerRadius="10dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/imageView2">

```

```
<androidx.constraintlayout.widget.ConstraintLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content">
```

```
<ImageView
    android:id="@+id/im3"
    android:layout_width="100dp"
    android:layout_height="100dp"
    android:src="@drawable/ic_launcher_foreground"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />
```

```
<TextView
```

```
    android:id="@+id/tv1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:nextFocusLeft="@id/im3"
    android:text="Constriant Layout"
    android:textColor="@color/white"
    android:textSize="24sp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toEndOf="@+id/im3"
    app:layout_constraintTop_toTopOf="parent" />
```

```
<TextView
```

```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="This is my text view"
    android:textColor="@color/white"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.275"
    app:layout_constraintStart_toEndOf="@+id/im3"
    app:layout_constraintTop_toBottomOf="@+id/tv1"
    app:layout_constraintVertical_bias="0.387" />
```

```
</androidx.constraintlayout.widget.ConstraintLayout>
```

```
</androidx.cardview.widget.CardView>
```

```
<androidx.cardview.widget.CardView
```

```
    android:id="@+id/CDV2"
    android:layout_width="match_parent"
    android:layout_height="275dp"
```



```

android:layout_marginTop="10dp"
android:layout_marginBottom="20dp"
android:layout_marginHorizontal="20dp"
app:cardBackgroundColor="@color/black"
app:cardCornerRadius="10dp"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toBottomOf="@+id/CDV1">

```

```

<androidx.constraintlayout.widget.ConstraintLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content">

```

```

<ImageView
    android:id="@+id/im4"
    android:layout_width="100dp"
    android:layout_height="100dp"
    android:src="@drawable/ic_launcher_foreground"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />

```

```

<TextView

```

```

    android:id="@+id/tv2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:nextFocusLeft="@id/im3"
    android:text="Constraint Layout"
    android:textColor="@color/white"
    android:textSize="24sp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toEndOf="@+id/im4"
    app:layout_constraintTop_toTopOf="parent" />

```

```

<TextView

```

```

    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="16dp"
    android:text="This is my text view"

```

```

    android:textColor="@color/white"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.275"
    app:layout_constraintStart_toEndOf="@+id/im4"
    app:layout_constraintTop_toBottomOf="@+id/tv2" />

```



```
<View
    android:layout_width="wrap_content"
    android:layout_height="200dp"
    android:background="@drawable/nature"
    android:src="@drawable/nature"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/im4"
/>
```

```
</androidx.constraintlayout.widget.ConstraintLayout>
```

```
</androidx.cardview.widget.CardView>
```

```
<com.google.android.material.bottomnavigation.BottomNavigationView
```

```
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_gravity="bottom"
    android:visibility="visible"
    android:id="@+id/bv1"
    app:labelVisibilityMode="auto"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.0"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/CDV2"
    app:layout_constraintVertical_bias="0.969"
    app:menu="@menu/menu" />
```

```
</androidx.constraintlayout.widget.ConstraintLayout>
```

```
package com.example.pr_6
```

```
import android.content.Intent
```

```
import androidx.appcompat.app.AppCompatActivity
```

```
import android.os.Bundle
```

```
import com.google.android.material.bottomnavigation.BottomNavigationView
```

```
class constrain_layout : AppCompatActivity() {
```

```
    override fun onCreate(savedInstanceState: Bundle?) {
```

```
        super.onCreate(savedInstanceState)
```

```
        setContentView(R.layout.activity_constrain_layout)
```

```
        val bottom: BottomNavigationView = findViewById(R.id.bv1)
```

```
        bottom.setOnNavigationItemSelectedListener(BottomNavigationView.OnNavigationItemSelectedListener
```

```
{
```

```
    when(it.itemId){
```

```
        R.id.LL->
```

```
{
```

```
    val intent = Intent(this@constrain_layout, MainActivity::class.java)
```

```
    startActivity(intent)
```

```
}
```

```
R.id.RL->
```

```
{
```

```
    val intent = Intent(this@constrain_layout, Relative_layout::class.java)
```

```
    startActivity(intent)
```

```
}
```

```
}
```

```
return@OnNavigationItemSelectedListener true
```

```
})
```

```
}
```

```
}
```

Menu.XML File:

```
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:app="http://schemas.android.com/apk/res-auto"
      xmlns:android="http://schemas.android.com/apk/res/android">
<item
    android:id="@+id/LL"
    android:enabled="true"
    android:title="Linear layout"
    android:icon="@drawable/home"/>
<item
    android:id="@+id/RL"
    android:enabled="true"
    android:title="Relative layout"
    android:icon="@drawable/home"/>
<item
    android:id="@+id/CS"
    android:enabled="true"
    android:title="Constrain layout"
    android:icon="@drawable/home"/>

</menu>
```

AndroidManifest.XML File:

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.pr_6">

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/Theme.Pr_6">
        <activity
            android:name=".constrain_layout"
            android:exported="true" />
        <activity
            android:name=".Relative_layout"
            android:exported="true" />
    </application>
</manifest>
```

```

<activity
    android:name=".MainActivity"
    android:exported="true">
    <intent-filter>
        <action android:name="android.intent.action.MAIN" />

        <category android:name="android.intent.category.LAUNCHER" />
    </intent-filter>
</activity>
</application>

```

</manifest>

OutPut:

