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| **PIRENS Institute of Business Management and Administration, Loni BK.** |
| **Roll Number: 10097 Sign: Date: / /** |
| **Student Name: Yash Bora** |
| **Subject Name: Mobile Application Development** |
| **Program Title: 1. Demonstrate different Layouts with different views in android Layouts- ConstraintLayout, RelativeLayout, TableLayout Views- Button, TextView,**  **EditText, WebView, CheckBox, RadioButton, ToggleButton, ImageButton, RatingBar, ProgressBar, SeekBar, VideoView, DatePicker, CalendarView, Spinner** |

**Android LinearLayout**

layout\_linear.xml

<LinearLayout xmlns:android="https://schemas.android.com/apk/res/android" android:orientation="vertical"

android:layout\_width="fill\_parent" android:layout\_height="fill\_parent" android:layout\_margin="@dimen/activity\_horizontal\_margin">

<Button

android:id="@+id/backbutton" android:text="Back" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" />

<TextView android:text="Row 2" android:layout\_width="wrap\_content" android:textSize="18sp"

android:layout\_margin="10dp" android:layout\_height="wrap\_content" />

<TextView android:text="Row 3" android:textSize="18sp"

android:layout\_margin="10dp" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" />

<TextView android:text="Row 4" android:textSize="18sp"

android:layout\_margin="10dp" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" />

<TextView android:text="Row 5" android:textSize="18sp"

android:layout\_margin="10dp" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" />

**Android RelativeLayout**

The following xml layout uses RelativeLayout: layout\_relative.xml

android:text="Back" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" />

<TextView android:id="@+id/firstName" android:text="First Name"

android:textSize="18sp" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content"

android:layout\_below="@id/backbutton" />

<TextView android:id="@+id/editFirstName" android:text="JournalDev" android:textSize="18sp" android:layout\_width="wrap\_content" android:layout\_marginLeft="10dp" android:layout\_height="wrap\_content"

android:layout\_toRightOf="@id/firstName" android:layout\_below="@id/backbutton"/>

<TextView android:id="@+id/editLastName" android:text="Layout Tutorial Example" android:textSize="18sp" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content"

android:layout\_alignTop="@+id/lastName" android:layout\_toRightOf="@+id/lastName" android:layout\_toEndOf="@+id/lastName" />

<TextView android:id="@+id/lastName" android:text="Last Name" android:textSize="18sp" android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content" android:layout\_marginTop="48dp" android:layout\_below="@+id/firstName" android:layout\_alignParentLeft="true" android:layout\_alignParentStart="true" android:layout\_marginRight="10dp" android:layout\_marginLeft="40dp" android:layout\_marginStart="40dp" />

<Button

android:id="@+id/next" android:text="Next" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content"

android:layout\_below="@+id/editLastName" android:layout\_alignLeft="@+id/editLastName" android:layout\_alignStart="@+id/editLastName" android:layout\_marginTop="37dp" />

</RelativeLayout>

As you can see we can rearrange elements based on their relative positions.

The following xml layout represents a custom layout having nested linear and relative layouts.

**layout\_mixed.xml**

android:textSize="18sp" android:layout\_margin="10dp" android:layout\_gravity="center" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" />

<TextView android:text="Vertical" android:textSize="18sp" android:layout\_margin="10dp" android:layout\_gravity="center"

android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" />

<TextView android:text="LL" android:textSize="18sp"

android:layout\_margin="10dp" android:layout\_gravity="center" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" />

</LinearLayout>

</LinearLayout>

<RelativeLayout android:layout\_width="match\_parent" android:layout\_height="match\_parent" android:layout\_below="@id/linearLayout">

<TextView

android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:textAppearance="?android:attr/textAppearanceMedium" android:text="Nested Relative Layout" android:id="@+id/textView" android:layout\_alignParentTop="true" android:layout\_centerHorizontal="true" />

<Button

android:id="@+id/back\_button\_pressed" android:text="back" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_below="@+id/textView" android:layout\_centerHorizontal="true" android:layout\_marginTop="66dp" />

</RelativeLayout>

</RelativeLayout>

**Android Layout Code**

layout\_linear.xml :

The SecondActivity and ThirdActivity load

the layout\_relative.xml and layout\_mixed.xml layouts respectively as shown below: package com.journaldev.layouts;

import android.app.Activity; import android.content.Intent; import android.os.Bundle; import android.view.View; import android.widget.Button;

public class SecondActivity extends Activity { Button back,next; @Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.layout\_relative); back=(Button)findViewById(R.id.backbutton); next=(Button)findViewById(R.id.next);

next.setOnClickListener(new View.OnClickListener() { @Override public void onClick(View v) {

Intent intent=new Intent(SecondActivity.this,ThirdActivity.class); intent.setFlags(Intent.FLAG\_ACTIVITY\_CLEAR\_TOP); startActivity(intent);

}

});

back.setOnClickListener(new View.OnClickListener() { @Override public void onClick(View v) {

Intent intent=new Intent(SecondActivity.this,MainActivity.class); intent.setFlags(Intent.FLAG\_ACTIVITY\_CLEAR\_TOP); startActivity(intent);

}

});

}

}

package com.journaldev.layouts;

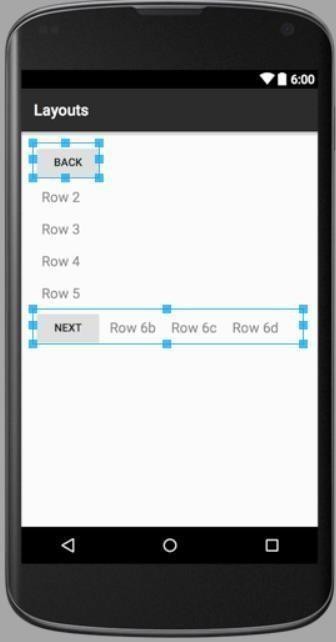
import android.app.Activity; import android.content.Intent; import android.os.Bundle; import android.view.View; import android.widget.Button;

public class ThirdActivity extends Activity { Button back; @Override

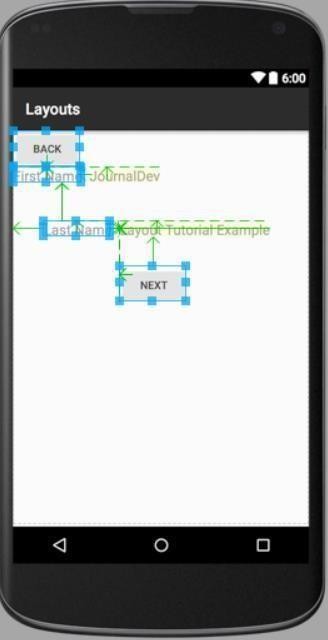
protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.layout\_mixed); back=(Button)findViewById(R.id.back\_button\_pressed);

**Outputs:** of the three layout files are shown below:

# layout\_linear.xml



1. **layout\_relative.xml**



The arrows pointing in the image above depict how siblings are positioned relative to each other and relative to the container.

# layout\_mixed.xml



This Relative Layout consists of a Vertical LinearLayout within a Nested Horizontal LinearLayout along with a Child RelativeLayout.

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| **Student Name: Yash Bora** |
| **Subject Name: Mobile Application Development** |
| **Program Title: 2.Write an android code to make phone call using intent.** |

# src/MainActivity.java.

package com.example.saira\_000.myapplicati

on; import android.Manifest; import android.content.Intent; import android.content.pm.PackageManage r; import android.net.Uri;

import android.os.Bundle; import

android.support.v4.app.ActivityCompat; import android.support.v7.app.AppCompatActi vity; import android.view.View;

import android.widget.Button;

public class MainActivity extends AppCompatActivity { private Button button;

@Override

protected void onCreate(Bundle savedInstanceState)

{ super.onCreate(savedInstanceState); setContentView(R.layout.activity\_main);

button = (Button) findViewById(R.id.buttonCall);

button.setOnClickListener(new View.OnClickListener() { public void onClick(View arg0) {

Intent callIntent = new Intent(Intent.ACTION\_CALL); callIntent.setData(Uri.parse("tel:0377778888"));

if

(ActivityCompat.checkSelfPermission(Main

Activity.this, Manifest.permission.CALL\_PHONE) !=

PackageManager.PERMISSION\_G

RANTED) { return;

}

});

}

startActivity(callIntent);

# res/layout/activity\_main.xml

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

<LinearLayout xmlns:android="[http://schemas.android.com/apk/res/android"](http://schemas.android.com/apk/res/android) android:layout\_width="fill\_parent"

android:layout\_height="fill\_parent" android:orientation="vertical" >

<Button android:id="@+id/buttonCall"

android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="call 0377778888" />

</LinearLayout>

**res/values/strings.xml**

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

<resources>

<string name="app\_name">My Application</string>

</resources>

# AndroidManifest.xml

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

<manifest xmlns:android="[http://schemas.android.com/apk/res/android"](http://schemas.android.com/apk/res/android) package="com.example.saira\_000.myapplication" >

<uses-permission android:name="android.permission.CALL\_PHONE" />

<application android:allowBackup="true" android:icon="@drawable/ic\_launcher" android:label="@string/app\_name" android:theme="@style/AppTheme" >

<activity

android:name="com.example.saira\_000.myapplication.MainActivity" android:label="@string/app\_name" >

<intent-filter>

<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.LAUNCHER" />

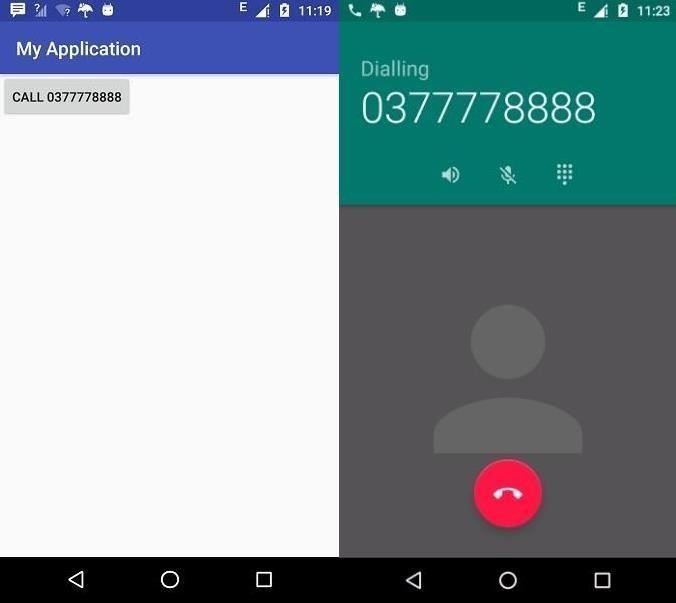
</intent-filter>

</activity>

</application>

</manifest>

**Output-**



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| --- |
| **PIRENS Institute of Business Management and Administration, Loni BK.** |
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| **Student Name: Yash Bora** |
| **Subject Name: Mobile Application Development** |
| **Program Title: Q3. Write an android code to turn ON/OFF Bluetooth.** |

# activity\_main.xml

RelativeLayout xmlns:android="[http://schemas.android.com/apk/res/android"](http://schemas.android.com/apk/res/android) xmlns:tools="<http://schemas.android.com/tools>" android:layout\_width="match\_parent" android:layout\_height="match\_parent"

>

<Switch android:id="@+id/switch1"

android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_centerHorizontal="true" android:layout\_centerVertical="true"

/>

<TextView android:id="@+id/textView1" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_above="@+id/switch1" android:layout\_centerHorizontal="true" android:layout\_marginBottom="62dp" android:gravity="center"

android:text="Bluetooth status show here" android:textAppearance="?android:attr/textAppearanceLarge" />

</RelativeLayout>

# MainActivity.java

import android.bluetooth.BluetoothAdapter; import android.content.Intent;

import android.support.v7.app.AppCompatActivity; import android.os.Bundle;

import android.widget.CompoundButton; import android.widget.Switch;

import android.widget.TextView;

public class EnableDisableBluetooth extends AppCompatActivity { Switch sw;

TextView textview; BluetoothAdapter bt; int i = 1;

Intent bluetoothIntent;

@Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity\_enable\_disable\_bluetooth);

sw = (Switch)findViewById(R.id.switch1);

textview = (TextView)findViewById(R.id.textView1);

bt = BluetoothAdapter.getDefaultAdapter(); sw.setOnCheckedChangeListener(new

CompoundButton.OnCheckedChangeListener() { @Override

public void onCheckedChanged(CompoundButton buttonView, boolean isChecked) {

if(isChecked)

{

BluetoothEnable();

}

else {

BluetoothDisable();

}

}

});

}

public void BluetoothEnable(){

bluetoothIntent = new Intent(BluetoothAdapter.ACTION\_REQUEST\_ENABLE); startActivityForResult(bluetoothIntent, i);

textview.setText("Bluetooth ON");

}

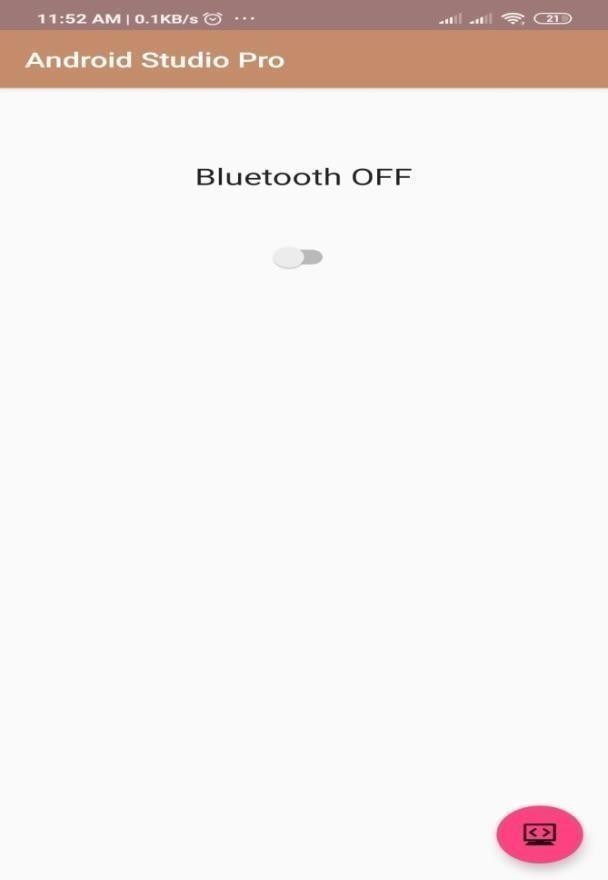
public void BluetoothDisable(){ bt.disable(); textview.setText("Bluetooth OFF");

}

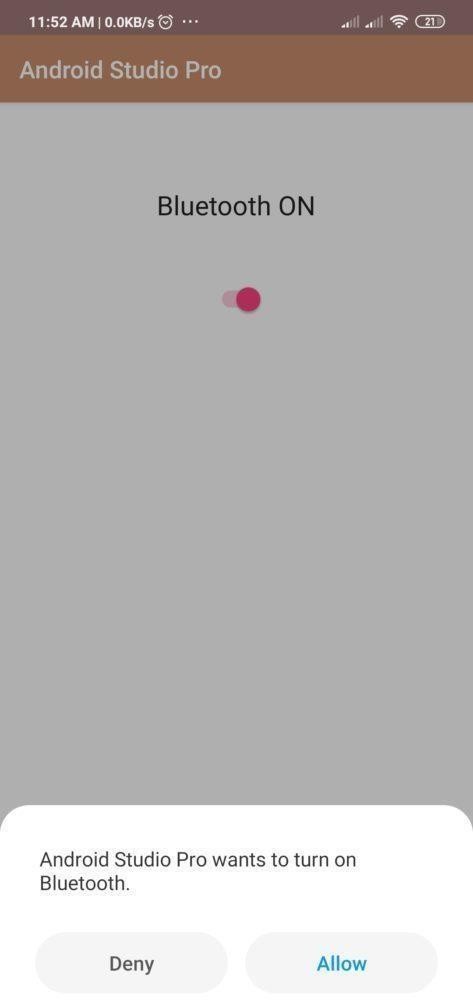
}

# Output

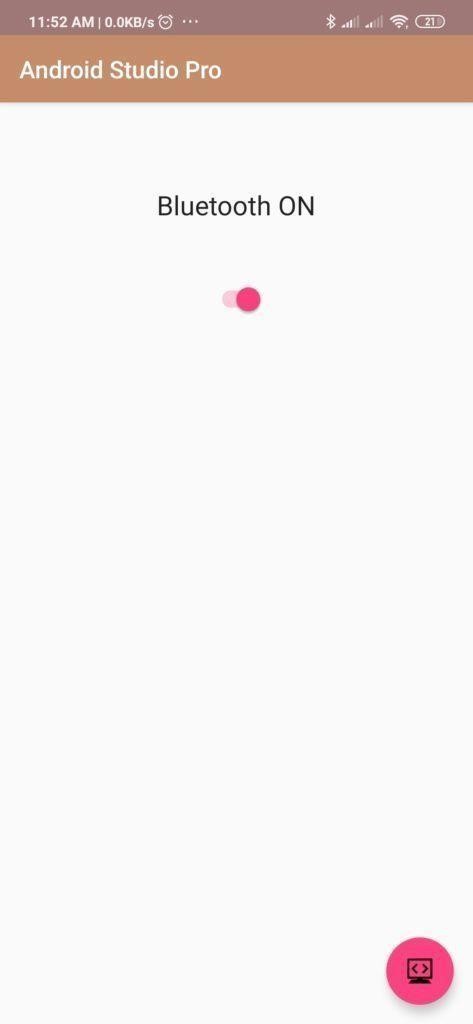
**1.**



**2.**



**3.**



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| **Roll Number:10097 Sign: Date: / /** |
| **Student Name: Yash Bora** |
| **Subject Name: Mobile Application Development** |
| **Program Title:Q4. Write an android code to turn ON/OFF the Wi-Fi.** |

**AndroidManifest.xml**

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

<manifest xmlns:android="[http://schemas.android.com/apk/res/android"](http://schemas.android.com/apk/res/android) package="com.java2blog.enabledisablewifiapp">

<uses-permission android:name="android.permission.ACCESS\_WIFI\_STATE"/>

<uses-permission android:name="android.permission.CHANGE\_WIFI\_STATE"/>

<application android:allowBackup="true" android:icon="@mipmap/ic\_launcher" android:label="@string/app\_name" android:supportsRtl="true" android:theme="@style/AppTheme">

<activity android:name=".MainActivity">

<intent-filter>

<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.LAUNCHER" />

</intent-filter>

</activity>

</application>

</manifest>

# activity\_main.xml MainActivity.java

package com.java2blog.enabledisablewifiapp; import android.content.Context;

import android.net.wifi.WifiManager;

import android.os.Bundle;

import android.support.v7.app.AppCompatActivity; import android.widget.CompoundButton;

import android.widget.TextView; import android.widget.ToggleButton;

import com.java2blog.enabledisablewifiapp.R;

public class MainActivity extends AppCompatActivity {

ToggleButton toggleButton; TextView textView;

@Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity\_main);

// Getting toggle button and textView from activity\_main toggleButton = (ToggleButton) findViewById(R.id.toggleButton); textView = (TextView) findViewById(R.id.textView);

// Put listener on toggle button

toggleButton.setOnCheckedChangeListener(new CompoundButton.OnCheckedCha ngeListener() {

@Override

public void onCheckedChanged(CompoundButton compoundButton, boolean che

cked) {

CE);

CE);

} else {

textView.setText("WiFi is OFF");

WifiManager wifi = (WifiManager) getSystemService(Context.WIFI\_SERVI

wifi.setWifiEnabled(false);

}

}

});

// For initial setting

if (toggleButton.isChecked()) { textView.setText("WiFi is ON");

WifiManager wifi = (WifiManager) getSystemService(Context.WIFI\_SERVICE); wifi.setWifiEnabled(true);

} else {

textView.setText("WiFi is OFF");

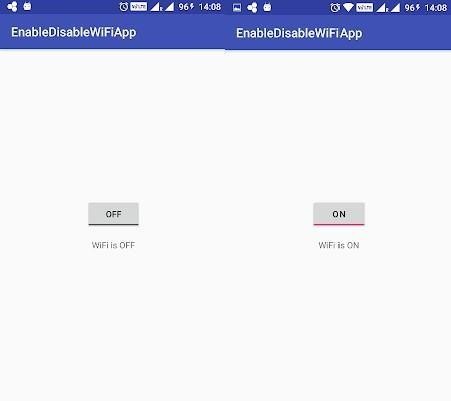
WifiManager wifi = (WifiManager) getSystemService(Context.WIFI\_SERVICE); wifi.setWifiEnabled(false);

}

}

}

# Output:-



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| --- |
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| **Student Name: Yash Bora** |
| **Subject Name: Mobile Application Development** |
| **Program Title: Q5. Design android application for login activity.** |

**activity\_login.XML**

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

**<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="**[**http://schemas.android.com/apk/res/android"**](http://schemas.android.com/apk/res/android) **xmlns:tools="**[**http://schemas.android.com/tools**](http://schemas.android.com/tools)**" android:layout\_width="match\_parent" android:layout\_height="match\_parent" xmlns:app="**[**http://schemas.android.com/apk/res-auto"**](http://schemas.android.com/apk/res-auto) **android:background="#FFFFFF" tools:context=".LoginActivity">**

**<TextView android:id="@+id/tv\_heading" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Account Login" android:textStyle="bold" android:textSize="16sp" android:textColor="#000" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintTop\_toTopOf="parent" android:layout\_marginTop="24dp"**

**/>**

**<ScrollView android:layout\_width="match\_parent" android:layout\_height="wrap\_content" app:layout\_constraintTop\_toBottomOf="@id/tv\_heading"**

**>**

**<androidx.constraintlayout.widget.ConstraintLayout android:layout\_width="match\_parent" android:layout\_height="match\_parent" android:focusable="true" android:focusableInTouchMode="true"**

**>**

**<com.google.android.material.textfield.TextInputLayout android:id="@+id/layout\_email" android:layout\_width="0dp" app:layout\_constraintWidth\_percent="0.7" android:layout\_height="wrap\_content" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintEnd\_toEndOf="parent" android:layout\_marginTop="50dp" android:textColorHint="#808080" app:layout\_constraintTop\_toTopOf="parent"**

**>**

**<EditText android:id="@+id/et\_email" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:hint="Email" android:gravity="center" android:padding="10dp" android:textColor="#000000" android:textColorHint="#808080" android:backgroundTint="#808080" android:textSize="15sp" android:inputType="textEmailAddress"**

**/>**

**</com.google.android.material.textfield.TextInputLayout>**

**<com.google.android.material.textfield.TextInputLayout android:id="@+id/layout\_password" android:layout\_width="0dp" app:layout\_constraintWidth\_percent="0.7" android:layout\_height="wrap\_content" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintEnd\_toEndOf="parent" android:layout\_marginTop="10dp" android:textColorHint="#808080" app:layout\_constraintTop\_toBottomOf="@+id/layout\_email"**

**>**

**<EditText android:id="@+id/et\_password" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:hint="Password" android:gravity="center" android:padding="10dp" android:textColor="#000000" android:textColorHint="#808080" android:backgroundTint="#808080" android:textSize="15sp" android:inputType="textPassword"**

**/>**

**</com.google.android.material.textfield.TextInputLayout>**

**<Button**

**android:id="@+id/bt\_login" android:layout\_width="0dp" android:layout\_height="50dp" app:layout\_constraintTop\_toBottomOf="@+id/layout\_password" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintEnd\_toEndOf="parent" android:text="Login" android:textColor="#FFFFFF" android:textSize="15sp" android:background="@color/colorPrimary" android:textAllCaps="false" android:layout\_marginTop="40dp" app:layout\_constraintWidth\_percent="0.7" style="?android:attr/borderlessButtonStyle" android:elevation="2dp" android:onClick="performSignUp"**

**/>**

**<LinearLayout android:id="@+id/layout\_already\_have\_account" android:layout\_width="0dp" app:layout\_constraintWidth\_percent="1.0" android:layout\_height="wrap\_content" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintEnd\_toEndOf="parent" android:layout\_marginTop="15dp" app:layout\_constraintTop\_toBottomOf="@+id/bt\_login"**

**android:orientation="horizontal" android:gravity="center"**

**>**

**<TextView android:id="@+id/tv\_already\_have\_account" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintEnd\_toEndOf="parent" android:textColor="#000" android:textSize="18sp" android:text="Already have an account?"**

**/>**

**<Button**

**android:id="@+id/bt\_signup" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintEnd\_toEndOf="parent" android:textColor="@color/colorPrimary"**

**Login Activity.JAVA**

**// Checking if the input in form is valid boolean validateInput() {**

**if (etEmail.getText().toString().equals("")) { etEmail.setError("Please Enter Email"); return false;**

**}**

**if (etPassword.getText().toString().equals("")) { etPassword.setError("Please Enter Password"); return false;**

**}**

**// checking the proper email format**

**if (!isEmailValid(etEmail.getText().toString())) { etEmail.setError("Please Enter Valid Email"); return false;**

**}**

**// checking minimum password Length**

**if (etPassword.getText().length() < MIN\_PASSWORD\_LENGTH) { etPassword.setError("Password Length must be more than " + MIN\_PASSWORD\_LENGTH + "characters"); return false;**

**}**

**return true;**

**}**

**boolean isEmailValid(String email) {**

**return Patterns.EMAIL\_ADDRESS.matcher(email).matches();**

**}**

**// Hook Click Event**

**public void performSignUp (View v) { if (validateInput()) {**

**// Input is valid, here send data to your server String email = etEmail.getText().toString();**

**String password = etPassword.getText().toString();**

**Toast.makeText(this,"Login Success",Toast.LENGTH\_SHORT).show();**

**// Here you can call you API**

**// Check this tutorial to call server api through Google Volley Library https://handyopinion.com**

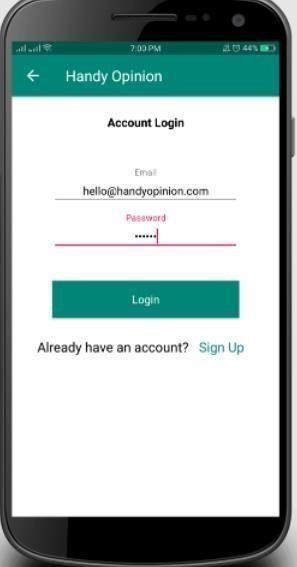
**}**

**}**

**public void goToSignup(View v) {**

**// Open your SignUp Activity if the user wants to signup**

**Output :**



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| **Student Name: Yash Bora** |
| **Subject Name: Mobile Application Development** |
| **Program Title: Q6. Create a fragment that has its own UI and enable your activities to communicate with fragments.** |

**XML files: fragment1.xml** file.

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

<RelativeLayout xmlns:android="<http://schemas.android.com/apk/res/android>" xmlns:tools="<http://schemas.android.com/tools>" android:layout\_width="match\_parent" android:layout\_height="match\_parent" tools:context=".fragments.Fragment1">

<!-- Text View for showing Fragment1 text -->

<TextView android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:text="Fragment 1" android:textSize="40sp" android:layout\_centerHorizontal="true" android:gravity="center" android:layout\_marginTop="20dp" android:textColor="@color/black"/>

<!-- Edit Text for taking user input -->

<EditText android:id="@+id/messageInput" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:text="Enter text to Pass" android:layout\_marginTop="200dp" android:gravity="center" android:layout\_marginLeft="30dp" android:layout\_marginRight="30dp" android:textSize="30sp"/>

<!-- Button for submit user response -->

<Button android:id="@+id/sendBtn"

android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:layout\_below="@+id/etText" android:text="Submit" android:backgroundTint="#0F9D58" android:textSize="20sp" android:textAllCaps="false" android:layout\_marginLeft="30dp" android:layout\_marginRight="30dp" android:layout\_marginTop="20dp" />

</RelativeLayout> fragment2.xml file.

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

<RelativeLayout xmlns:android="<http://schemas.android.com/apk/res/android>" xmlns:tools="<http://schemas.android.com/tools>" android:layout\_width="match\_parent" android:layout\_height="match\_parent" tools:context=".fragments.Fragment2">

<!-- Text View for showing Fragment2 text -->

<TextView android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:text="Fragment 2" android:textSize="40sp" android:layout\_centerHorizontal="true" android:gravity="center" android:layout\_marginTop="20dp" android:textColor="@color/black"/>

<!-- Frame Layout which will replaced by data from Fragment1 -->

<FrameLayout android:id="@+id/frameLayout" android:layout\_width="match\_parent" android:layout\_height="wrap\_content">

<TextView android:id="@+id/displayMessage" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:text="Text"

android:textSize="30sp"

Create Interface

* MainActivity.java: package com.mrtechy.gfg import androidx.appcompat.app.AppCompatActivity import android.os.Bundle

import com.mrtechy.gfg.fragments.Fragment1 import com.mrtechy.gfg.fragments.Fragment2

class MainActivity : AppCompatActivity(), Communicator { override fun onCreate(savedInstanceState: Bundle?) {

super.onCreate(savedInstanceState) setContentView(R.layout.activity\_main)

// created instance of Fragment1 val fragment1 = Fragment1()

// Frame manager called to replace Fragment2 frame layout with Fragment1 data supportFragmentManager.beginTransaction().replace(R.id.frameLayout,fragment1

).commit()

}

// Override function which we

// have created in our interface

override fun passData(ediTextInput: String) { val bundle = Bundle() bundle.putString("message", ediTextInput)

* Fragment1 & Fragment file

Output:



22

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| **Roll Number:10097 Sign: Date: / /** |
| **Student Name: Yash Bora** |
| **Subject Name: Mobile Application Development** |
| **Program Title:Q7. Demonstrate Array Adapter using List View to display list of fruits.** |

a

ctivity\_main.xml:

custom\_list\_view.xml

<ImageView android:id="@+id/imageView" android:layout\_width="84dp" android:layout\_height="84dp" android:padding="16dp" tools:ignore="ContentDescription" />

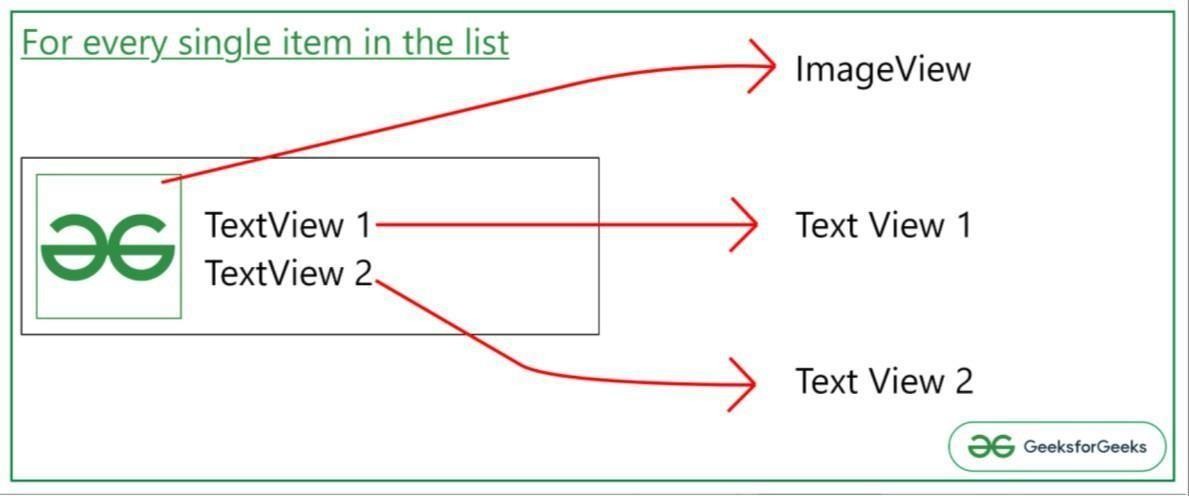
<LinearLayout android:layout\_width="match\_parent" android:layout\_height="match\_parent" android:gravity="center\_vertical" android:orientation="vertical">

<TextView android:id="@+id/textView1" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:layout\_marginTop="16dp" android:gravity="bottom|left"

android:textColor="@android:color/black" android:textSize="18sp" android:textStyle="bold" tools:ignore="RtlHardcoded" />

<TextView android:id="@+id/textView2" android:layout\_width="match\_parent" android:layout\_height="wrap\_content"

android:layout\_marginBottom="16dp"



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| --- |
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| **Student Name: Yash Bora** |
| **Subject Name: Mobile Application Development** |
| **Program Title: 8. Write an application to demonstrate Alert Dialog Box in android.** |

# Activity\_maix.xml

<?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"](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=".MainActivity">

<TextView

android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Press The Back Button of Your Phone." android:textStyle="bold"

android:textSize="30dp" android:gravity="center\_horizontal" android:layout\_marginTop="180dp"

/>

</RelativeLayout>

# MainActivity.java

package org.geeksforgeeks.navedmalik.alertdialog; import android.content.DialogInterface;

import android.support.v7.app.AlertDialog;

import android.support.v7.app.AppCompatActivity; import android.os.Bundle;

public class MainActivity extends AppCompatActivity { @Override

protected void onCreate(Bundle savedInstanceState)

{

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

}

// Declare the onBackPressed method

// when the back button is pressed

// this method will call @Override

public void onBackPressed()

{

// Create the object of

// AlertDialog Builder class AlertDialog.Builder builder

= new AlertDialog

.Builder(MainActivity.this);

// Set the message show for the Alert time builder.setMessage("Do you want to exit ?");

// Set Alert Title builder.setTitle("Alert !");

// Set Cancelable false

// for when the user clicks on the outside

// the Dialog Box then it will remain show builder.setCancelable(false);

// Set the positive button with yes name

// OnClickListener method is use of

// DialogInterface interface.

builder

.setPositiveButton( "Yes",

new DialogInterface

.OnClickListener() {

@Override

public void onClick(DialogInterface dialog, int which)

{

}

});

// When the user click yes button

// then app will close finish();

// Set the Negative button with No name

// OnClickListener method is use

// of DialogInterface interface. builder

.setNegativeButton( "No",

new DialogInterface

.OnClickListener() {

@Override

public void onClick(DialogInterface dialog, int which)

{

// If user click no

// then dialog box is canceled. dialog.cancel();

}

});

// Create the Alert dialog

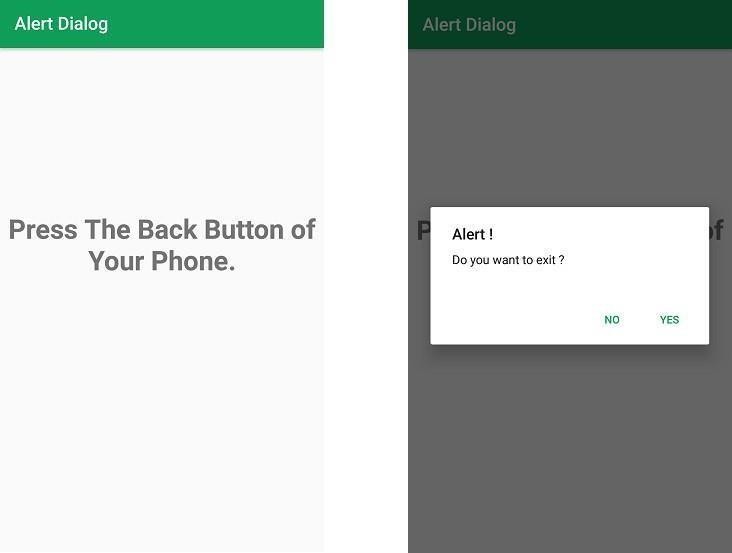
AlertDialog alertDialog = builder.create();

// Show the Alert Dialog box alertDialog.show();

}

}

# Output:-



|  |
| --- |
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| **Student Name: Yash Bora** |
| **Subject Name: Mobile Application Development** |
| **Program Title:Q 9. Demonstrate Options Menu, Context Menu and Popup Menu in android** |

1. Option menu

# Mymenu.xml

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

<menu xmlns:android="[http://schemas.android.com/apk/res/android"](http://schemas.android.com/apk/res/android) xmlns:app="[http://schemas.android.com/apk/res-auto"](http://schemas.android.com/apk/res-auto)>

<item

android:id="@+id/item1" android:title="Option 1" app:showAsAction="never"

/>

<item

android:id="@+id/item2" android:title="Option 2" app:showAsAction="never"

/>

<item

android:id="@+id/item3" android:title="Option 3" app:showAsAction="never">

<menu>

<item android:id="@+id/subitem1" android:title="Subitem1"/>

<item android:id="@+id/subitem2" android:title="Subitem2"/>

</menu>

</item>

</menu>

# MainActivity.java

package com.example.optionmenu;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle; import android.view.Menu;

import android.view.MenuInflater;

public class MainActivity extends AppCompatActivity { @Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity\_main);

}

@Override

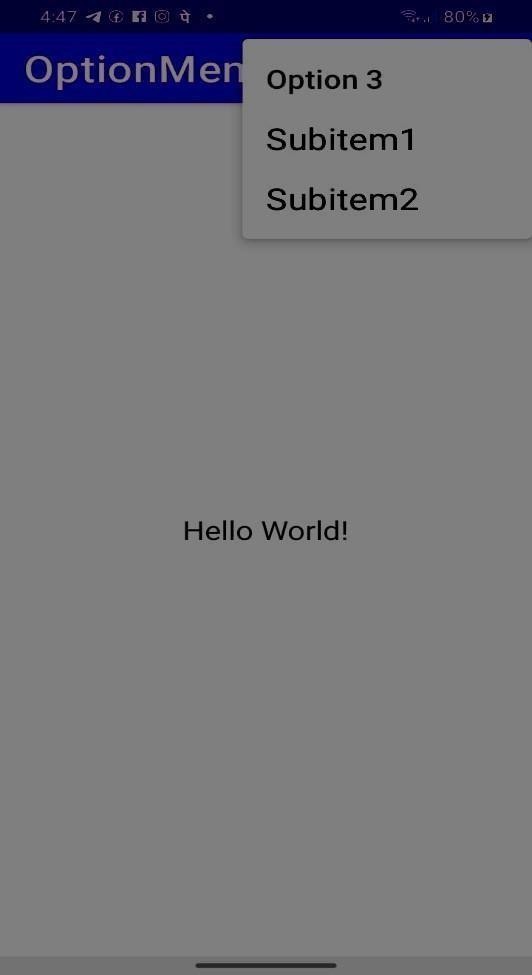
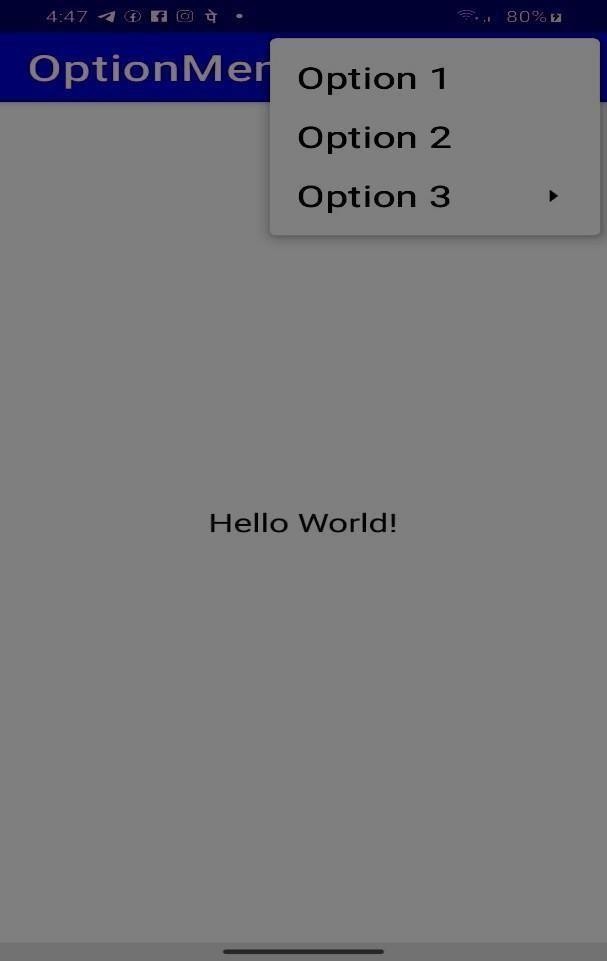
public boolean onCreateOptionsMenu(Menu menu) { MenuInflater inflater = getMenuInflater(); inflater.inflate(R.menu.mymenu,menu);

return true;

}

}

# Output:



**B Context Menu**

# ActivityMain.xml

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

<android.support.constraint.ConstraintLayout xmlns:android="<http://schemas.android.com/apk/res/android>"

xmlns:app="[http://schemas.android.com/apk/res-auto"](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="example.javatpoint.com.contextmenu.MainActivity">

<ListView android:layout\_width="368dp" android:layout\_height="495dp" android:id="@+id/listView" android:layout\_marginEnd="8dp" android:layout\_marginStart="8dp" android:layout\_marginTop="8dp"

app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintHorizontal\_bias="0.0" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintTop\_toTopOf="parent" />

</android.support.constraint.ConstraintLayout>

# main\_menu.xml

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

<menu xmlns:android="[http://schemas.android.com/apk/res/android"](http://schemas.android.com/apk/res/android)>

<item android:id="@+id/call" android:title="Call" />

<item android:id="@+id/sms" android:title="SMS" />

</menu>

MainActivity.java

package example.javatpoint.com.contextmenu; import android.support.v7.app.AppCompatActivity;

import android.os.Bundle;

import android.view.ContextMenu;

import android.view.MenuInflater; import android.view.MenuItem; import android.view.View;

import android.widget.ArrayAdapter; import android.widget.ListView; import android.widget.Toast;

public class MainActivity extends AppCompatActivity { ListView listView;

String contacts[]={"Ajay","Sachin","Sumit","Tarun","Yogesh"}; @Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity\_main); listView=(ListView)findViewById(R.id.listView);

ArrayAdapter<String> adapter=new ArrayAdapter<String>(this,android.R.layout.simple\_list\_item\_1,contacts);

listView.setAdapter(adapter);

// Register the ListView for Context menu registerForContextMenu(listView);

}

@Override

public void onCreateContextMenu(ContextMenu menu, View v, ContextMenu.ContextMenuInfo menuInfo)

{

super.onCreateContextMenu(menu, v, menuInfo); MenuInflater inflater = getMenuInflater(); inflater.inflate(R.menu.menu\_main, menu); menu.setHeaderTitle("Select The Action");

}

@Override

public boolean onContextItemSelected(MenuItem item){ if(item.getItemId()==R.id.call){

Toast.makeText(getApplicationContext(),"calling code",Toast.LENGTH\_LONG).show();

}

else if(item.getItemId()==R.id.sms){

Toast.makeText(getApplicationContext(),"sending sms code",Toast.LENGTH\_LONG).show();

}else{

return false;

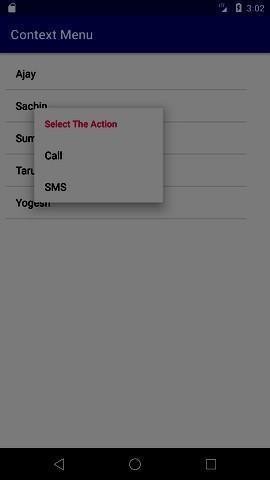
}

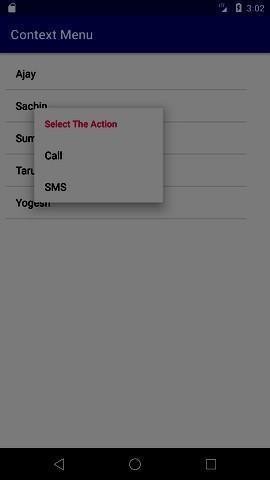
return true;

}

}

# Output:-





1. Popup menu

# ActivityMain.xml

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

<android.support.constraint.ConstraintLayout xmlns:android="<http://schemas.android.com/apk/res/android>"

xmlns:app="[http://schemas.android.com/apk/res-auto"](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="example.javatpoint.com.popupmenu.MainActivity">

<Button

android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:id="@+id/button" android:text="Click"

app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintLeft\_toLeftOf="parent" app:layout\_constraintRight\_toRightOf="parent" app:layout\_constraintTop\_toTopOf="parent" />

</android.support.constraint.ConstraintLayout> PopupMenu.xml

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

<menu xmlns:android="[http://schemas.android.com/apk/res/android"](http://schemas.android.com/apk/res/android)>

<item

android:id="@+id/one" android:title="One" />

<item

android:id="@+id/two" android:title="Two"/>

<item

android:id="@+id/three" android:title="Three"/>

</menu>

MainActivity.java

package example.javatpoint.com.popupmenu;

import android.support.v7.app.AppCompatActivity; import android.os.Bundle;

import android.view.MenuItem; import android.view.View; import android.widget.Button;

import android.widget.PopupMenu; import android.widget.Toast;

public class MainActivity extends AppCompatActivity { Button button;

@Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity\_main);

button = (Button) findViewById(R.id.button); button.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

//Creating the instance of PopupMenu

PopupMenu popup = new PopupMenu(MainActivity.this, button);

//Inflating the Popup using xml file popup.getMenuInflater().inflate(R.menu.popup\_menu, popup.getMenu());

//registering popup with OnMenuItemClickListener popup.setOnMenuItemClickListener(new

PopupMenu.OnMenuItemClickListener() {

public boolean onMenuItemClick(MenuItem item) { Toast.makeText(MainActivity.this,"You Clicked : " + item.getTitle(),

Toast.LENGTH\_SHORT).show();

return true;

}

});

popup.show();//showing popup menu

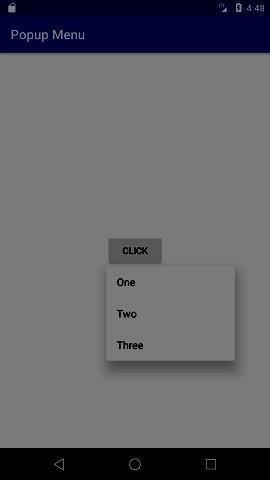
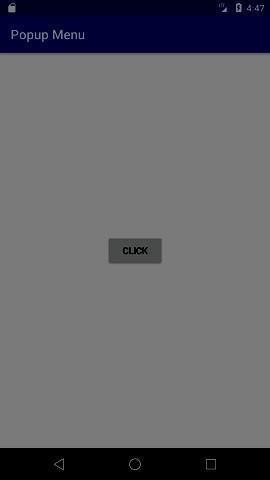
}

});//closing the setOnClickListener method

}

}

# Output:



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| --- |
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| **Student Name: Yash Bora** |
| **Subject Name: Mobile Application Development** |
| **Program Title: Q10. Write an application to produce Notification.** |

**activity\_main.xml**

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

<android.support.constraint.ConstraintLayout xmlns:android="[http://schemas.android.co](http://schemas.android.co/) m/apk/res/android"

xmlns:app="[http://schemas.android.com/apk/res-auto"](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="example.javatpoint.com.androidnotification.MainActivity">

<TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="ANDROID NOTIFICATION"

app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintLeft\_toLeftOf="parent" app:layout\_constraintRight\_toRightOf="parent" app:layout\_constraintTop\_toTopOf="parent" app:layout\_constraintVertical\_bias="0.091" android:textAppearance="@style/Base.TextAppearance.AppCompat.Medium"/>

<Button

android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:id="@+id/button" android:layout\_marginBottom="112dp" android:layout\_marginEnd="8dp" android:layout\_marginStart="8dp"

android:text="Notify" app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintStart\_toStartOf="parent" />

</android.support.constraint.ConstraintLayout>

# activity\_notification\_view.xml

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

<android.support.constraint.ConstraintLayout xmlns:android="[http://schemasandroid.com](http://schemasandroid.com/)

/apk/res/android" xmlns:app="[http://schemas.android.com/apk/res-auto"](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="example.javatpoint.com.androidnotification.NotificationView">

<TextView android:id="@+id/textView2" android:layout\_width="fill\_parent" android:layout\_height="wrap\_content" android:gravity="center"

android:text="your detail of notification..." android:textAppearance="@style/Base.TextAppearance.AppCompat.Medium" />

<TextView android:id="@+id/textView" android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content" android:layout\_marginBottom="8dp" android:layout\_marginEnd="8dp" android:layout\_marginStart="8dp" android:layout\_marginTop="8dp" app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintHorizontal\_bias="0.096" app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/textView2" app:layout\_constraintVertical\_bias="0.206"

android:textAppearance="@style/Base.TextAppearance.AppCompat.Medium"/>

</android.support.constraint.ConstraintLayout>

# MainActivity.java

package example.javatpoint.com.androidnotification;

import android.app.NotificationManager; import android.app.PendingIntent;

import android.content.Context; import android.content.Intent;

import android.support.v4.app.NotificationCompat; import android.support.v7.app.AppCompatActivity; import android.os.Bundle;

import android.view.View; import android.widget.Button;

public class MainActivity extends AppCompatActivity { Button button;

@Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity\_main);

button = findViewById(R.id.button); button.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) { addNotification();

}

});

}

private void addNotification() { NotificationCompat.Builder builder =

new NotificationCompat.Builder(this)

.setSmallIcon(R.drawable.messageicon) //set icon for notification

.setContentTitle("Notifications Example") //set title of notification

notification

.setContentText("This is a notification message")//this is notification message

.setAutoCancel(true) // makes auto cancel of notification

.setPriority(NotificationCompat.PRIORITY\_DEFAULT); //set priority of

Intent notificationIntent = new Intent(this, NotificationView.class); notificationIntent.addFlags(Intent.FLAG\_ACTIVITY\_CLEAR\_TOP);

//notification message will get at NotificationView notificationIntent.putExtra("message", "This is a notification message");

PendingIntent pendingIntent = PendingIntent.getActivity(this, 0, notificationIntent, PendingIntent.FLAG\_UPDATE\_CURRENT);

builder.setContentIntent(pendingIntent);

NotificationManager manager = (NotificationManager) getSystemService(Cntext.N OTIFICATION\_SERVICE);

manager.notify(0, builder.build());

}

}

# NotificationView.java

package example.javatpoint.com.androidnotification;

import android.support.v7.app.AppCompatActivity; import android.os.Bundle;

import android.widget.TextView; import android.widget.Toast;

public class NotificationView extends AppCompatActivity { TextView textView;

@Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity\_notification\_view); textView = findViewById(R.id.textView);

//getting the notification message

String message=getIntent().getStringExtra("message");

textView.setText(message);

}

}

# strings.xml

<resources>

<string name="app\_name">AndroidNotification</string>

<string name="notification\_activity">NotificationView</string>

</resources>

# AndroidManifest.xml

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

<manifest xmlns:android="[http://schemas.android.com/apk/res/android"](http://schemas.android.com/apk/res/android) package="example.javatpoint.com.androidnotification">

<application android:allowBackup="true"

android:icon="@mipmap/ic\_launcher" android:label="@string/app\_name" android:roundIcon="@mipmap/ic\_launcher\_round" android:supportsRtl="true" android:theme="@style/AppTheme">

<activity android:name=".MainActivity">

<intent-filter>

<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.LAUNCHER" />

</intent-filter>

</activity>

<activity android:name=".NotificationView" android:label="@string/notification\_activity" android:parentActivityName=".MainActivity">

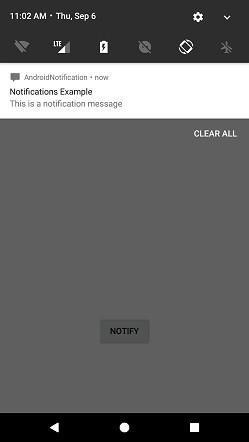
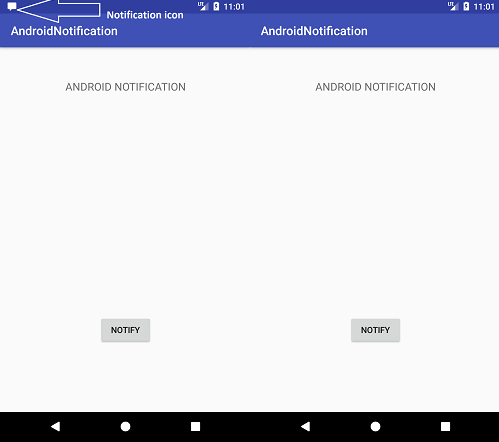
<meta-data android:name="android.support.PARENT\_ACTIVITY" android:value=".MainActivity"/>

</activity>

</application>

</manifest>

# Output:



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| **Student Name: Yash Bora** |
| **Subject Name: Mobile Application Development** |
| **Program Title: Q11. Demonstrate WebView to display the web pages in an android application ActivityMain.xml** |

**Program:-**

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

<android.support.constraint.ConstraintLayout xmlns:android="<http://schemas.android.com/apk/res/android>"

xmlns:app="[http://schemas.android.com/apk/res-auto"](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="example.javatpoint.com.webview.MainActivity">

<WebView android:layout\_width="match\_parent" android:layout\_height="match\_parent" android:id="@+id/webView"

app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintLeft\_toLeftOf="parent" app:layout\_constraintRight\_toRightOf="parent" app:layout\_constraintTop\_toTopOf="parent" />

</android.support.constraint.ConstraintLayout>

mainActivity.java

package example.javatpoint.com.webview;

import android.support.v7.app.AppCompatActivity; import android.os.Bundle;

import android.webkit.WebView;

public class MainActivity extends AppCompatActivity { @Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity\_main);

WebView mywebview = (WebView) findViewById(R.id.webView);

// mywebview.loadUrl("https://[www.javatpoint.com/](http://www.javatpoint.com/)");

/\*String data = "<html><body><h1>Hello, Javatpoint!</h1></body></html>"; mywebview.loadData(data, "text/html", "UTF-8"); \*/

mywebview.loadUrl("file:///android\_asset/myresource.html");

}

}

# Output:



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| **PIRENS Institute of Business Management and Administration, Loni BK.** |
| **Roll Number: 10097 Sign: Date: / /** |
| **Student Name: Yash Bora** |
| **Subject Name: Mobile Application Development** |
| **Program Title:Q 12. Write an android app to write JSON data into a file and read JSON data from created file.** |

**Activity\_man.xml :**

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

<RelativeLayout xmlns:android="[http://schemas.android.com/apk/res/android"](http://schemas.android.com/apk/res/android) xmlns:app="[http://schemas.android.com/apk/res-auto"](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=".MainActivity">

<TextView

android:id="@+id/name" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_centerHorizontal="true" android:layout\_marginTop="50dp" android:text="Name" android:textColor="#000" android:textSize="20sp" />

<TextView

android:id="@+id/salary" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_centerHorizontal="true" android:layout\_marginTop="80dp" android:text="Salary" android:textColor="#000" android:textSize="20sp"

/>

</RelativeLayout>

# MainActivity.java

@SuppressLint("SetTextI18n") @Override

protected void onCreate(Bundle savedInstanceState)

{ super.onCreate(savedInstanceState); setContentView(R.layout.activity\_main);

// get the reference of TextView's employeeName = findViewById(R.id.name); employeeSalary = findViewById(R.id.salary);

try {

// get JSONObject from JSON file

JSONObject obj = (new JSONObject(JSON\_STRING)).getJSONObject("employee");

// get employee name and salary

name = obj.getString("name"); salary = obj.getString("salary");

// set employee name and salary in TextView's employeeName.setText("Name: "+name); employeeSalary.setText("Salary: "+salary);

} catch (JSONException e) { e.printStackTrace();

}

}

}

# Output:-