MainActivity.java  
  
package com.example.exp\_5;

import android.os.Bundle;

import android.view.ContextMenu;

import android.view.MenuItem;

import android.view.View;

import android.widget.Button;

import android.widget.PopupMenu;

import android.widget.Toast;

import androidx.appcompat.app.AlertDialog;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

private Button btnPopup, btnOption, btnContext;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

btnPopup = findViewById(R.id.btnPopup);

btnOption = findViewById(R.id.btnOption);

btnContext = findViewById(R.id.btnContext);

btnPopup.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

showPopupDialog(v);

}

});

btnOption.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

showOptionMenu(v);

}

});

registerForContextMenu(btnContext); // This line registers the button for context menu

}

private void showPopupDialog(View v) {

AlertDialog.Builder builder = new AlertDialog.Builder(this);

View dialogView = getLayoutInflater().inflate(R.layout.popup\_menu, null);

builder.setView(dialogView);

AlertDialog alertDialog = builder.create();

alertDialog.show();

Button btnClosePopup = dialogView.findViewById(R.id.btnClosePopup);

btnClosePopup.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

alertDialog.dismiss();

}

});

}

private void showOptionMenu(View v) {

PopupMenu popupMenu = new PopupMenu(this, v);

popupMenu.getMenuInflater().inflate(R.menu.option\_menu, popupMenu.getMenu());

popupMenu.setOnMenuItemClickListener(new

PopupMenu.OnMenuItemClickListener() {

@Override

public boolean onMenuItemClick(MenuItem item) {

if (item.getItemId() == R.id.menu\_item\_1) {

showToast("Option 1 selected");

return true;

} else if (item.getItemId() == R.id.menu\_item\_2) {

showToast("Option 2 selected");

return true;

}

return false;

}

});

popupMenu.show();

}

@Override

public void onCreateContextMenu(ContextMenu menu, View v,

ContextMenu.ContextMenuInfo menuInfo) {

super.onCreateContextMenu(menu, v, menuInfo);

getMenuInflater().inflate(R.menu.context\_menu, menu);

}

public boolean onContextItemSelected(MenuItem item) {

if (item.getItemId() == R.id.context\_item\_1) {

showToast("Context item 1 selected");

return true;

} else if (item.getItemId() == R.id.context\_item\_2) {

showToast("Context item 2 selected");

return true;

}

return super.onContextItemSelected(item);

}

private void showToast(String message) {

Toast.makeText(this, message, Toast.LENGTH\_SHORT).show();

}

}

Activity\_main.xml  
  
  
  
<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"

android:padding="16dp"

tools:context=".MainActivity">

<Button

android:id="@+id/btnPopup"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Show Popup Dialog"

android:layout\_centerHorizontal="true"

android:layout\_marginTop="50dp"/>

<Button

android:id="@+id/btnOption"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Show Option Menu"

android:layout\_below="@id/btnPopup"

android:layout\_centerHorizontal="true"

android:layout\_marginTop="20dp"/>

<Button

android:id="@+id/btnContext"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Show Context Menu"

android:layout\_below="@id/btnOption"

android:layout\_centerHorizontal="true"

android:layout\_marginTop="20dp"/>

</RelativeLayout>

context\_menu.xml  
  
<?xml version="1.0" encoding="utf-8"?>

<menu xmlns:android="http://schemas.android.com/apk/res/android">

<item

android:id="@+id/context\_item\_1"

android:title="Context Item 1"/>

<item

android:id="@+id/context\_item\_2"

android:title="Context Item 2"/>

</menu>

Option\_menu.xml

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

<menu xmlns:android="http://schemas.android.com/apk/res/android">

<item

android:id="@+id/menu\_item\_1"

android:title="Option 1"/>

<item

android:id="@+id/menu\_item\_2"

android:title="Option 2"/>

</menu>  
  
  
  
popup\_menu.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="wrap\_content"

android:orientation="vertical">

<TextView

android:id="@+id/textPopup"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="This is a Popup Dialog"

android:padding="16dp"

android:textSize="18sp"

android:textColor="@android:color/black"

android:gravity="center"/>

<Button

android:id="@+id/btnClosePopup"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="Close"/>

</LinearLayout>