**App 5: Develop an Android app to demonstrate use of all Menu types.**

**MainActivity.java:**

package com.example.androidmenu;

import androidx.annotation.NonNull;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.Menu;

import android.view.MenuItem;

import android.view.View;

import android.widget.Button;

import android.widget.PopupMenu;

import android.widget.Toast;

import com.example.androidmenu.R;

public class MainActivity extends AppCompatActivity

{

Button b1;

@Override

protected void onCreate(Bundle savedInstanceState)

{

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

b1=findViewById(R.id.btn);

b1.setOnClickListener(new View.OnClickListener()

{

@Override

public void onClick(View view)

{

PopupMenu popup=new PopupMenu(MainActivity.this,b1);

popup.getMenuInflater().inflate(R.menu.popup, popup.getMenu());

popup.setOnMenuItemClickListener(new PopupMenu.OnMenuItemClickListener()

{

@Override

public boolean onMenuItemClick(MenuItem menuItem)

{

Toast.makeText(MainActivity.this,"you clicked on "+menuItem.getTitle(), Toast.LENGTH\_LONG).show();

return true;

}

});

popup.show();

}

});

}

@Override

public boolean onCreateOptionsMenu(Menu menu)

{

getMenuInflater().inflate(R.menu.option,menu);

return true;

}

@Override

public boolean onOptionsItemSelected(@NonNull MenuItem item)

{

int id = item.getItemId();

switch (id)

{

case R.id.item1:

Toast.makeText(getApplicationContext(), "settings ", Toast.LENGTH\_SHORT).show();

return true;

case R.id.item2:

Toast.makeText(getApplicationContext(), "refresh ", Toast.LENGTH\_SHORT).show();

return true;

case R.id.item3:

Toast.makeText(getApplicationContext(), "exit ", Toast.LENGTH\_SHORT).show();

return true;

default:

return super.onOptionsItemSelected(item);

}

}

}

**Activity\_main.xml:**

<?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=".MainActivity">

<Button

android:id="@+id/btn"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Long Click"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>

**Option.xml:**

<?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/item1"  
 android:title="setting" />  
 <item  
 android:id="@+id/item2"  
 android:title="refresh" />  
 <item  
 android:id="@+id/item3"  
 android:title="Exit" />  
  
</menu>

**Popup.xml:**

<?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/cut"  
 android:title="cut" />  
 <item android:title="copy"  
 android:id="@+id/copy" />  
 <item android:title="paste"  
 android:id="@+id/paste"/>  
</menu>

**OUTPUT:**

 