**PRACTICAL 10**

**Aim: Create an app which having two EditText with caption No1 and No2. App also having Option menu having three options with caption: Addition, Subtraction and Multiplication. On selection of any option appropriate**

**output should be display in TextView.**

**Code:**

**JAVA FILE: (MainActivity.java)**

package com.example.practical10;

import android.os.Bundle;

import android.view.Menu;

import android.view.MenuInflater;

import android.view.MenuItem;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.PopupMenu;

import android.widget.TextView;

import androidx.annotation.NonNull;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

private EditText editTextNo1, editTextNo2;

private TextView resultTextView;

private Button btnOptions;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.*activity\_main*);

editTextNo1 = findViewById(R.id.*no1*);

editTextNo2 = findViewById(R.id.*no2*);

resultTextView = findViewById(R.id.*tvResult*);

btnOptions = findViewById(R.id.*button*);

btnOptions.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

showPopupMenu();

}

});

}

private void showPopupMenu() {

PopupMenu popupMenu = new PopupMenu(this, btnOptions);

MenuInflater inflater = popupMenu.getMenuInflater();

inflater.inflate(R.menu.*menu*, popupMenu.getMenu());

popupMenu.setOnMenuItemClickListener(new PopupMenu.OnMenuItemClickListener() {

@Override

public boolean onMenuItemClick(MenuItem item) {

double num1 = Double.*parseDouble*(editTextNo1.getText().toString());

double num2 = Double.*parseDouble*(editTextNo2.getText().toString());

double result = 0;

String operation = " ";

if (item.getItemId() == R.id.*menu\_addition*) {

result = num1 + num2;

operation = "Addition";

} else if (item.getItemId() == R.id.*menu\_subtraction*) {

result = num1 - num2;

operation = "Substraction";

} else if (item.getItemId() == R.id.*menu\_multiplication*) {

result = num1 \* num2;

operation = "Multiplication";

}

resultTextView.setText("Result of "+ operation + " --> " + result);

return true;

}

});

popupMenu.show();

}

}

**XML FILE: (activity\_main.xml)**

*<?*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"

android:padding="16dp"

tools:context=".MainActivity">

<TextView

android:id="@+id/textView2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text=" Name: Angat Shah \n Enrollment No: 202203103510097 \n Branch: B.tech CSE"

android:layout\_marginTop="50dp"

android:layout\_marginLeft="75dp"

/>

<EditText

android:id="@+id/etNo1"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:hint="FIRST NUMBER"

android:textAlignment="center"

android:layout\_marginTop="170dp"

/>

<EditText

android:id="@+id/etNo2"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="40dp"

android:layout\_below="@id/etNo1"

android:textAlignment="center"

android:hint="SECOND NUMBER"

/>

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginTop="50dp"

android:layout\_below="@+id/etNo2"

android:layout\_centerHorizontal="true"

android:id="@+id/btnCalculate"

android:text="Calculate"

/>

<TextView

android:id="@+id/tvResult"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

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

android:layout\_marginTop="110dp"

android:textAlignment="center"

android:textSize="40dp"

android:textStyle="bold"

/>

</RelativeLayout>

**XML FILE(res/menu): (menu.xml)**

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

<item

android:id="@+id/menu\_addition"

android:title="Addition" />

<item

android:id="@+id/menu\_subtraction"

android:title="Subtraction" />

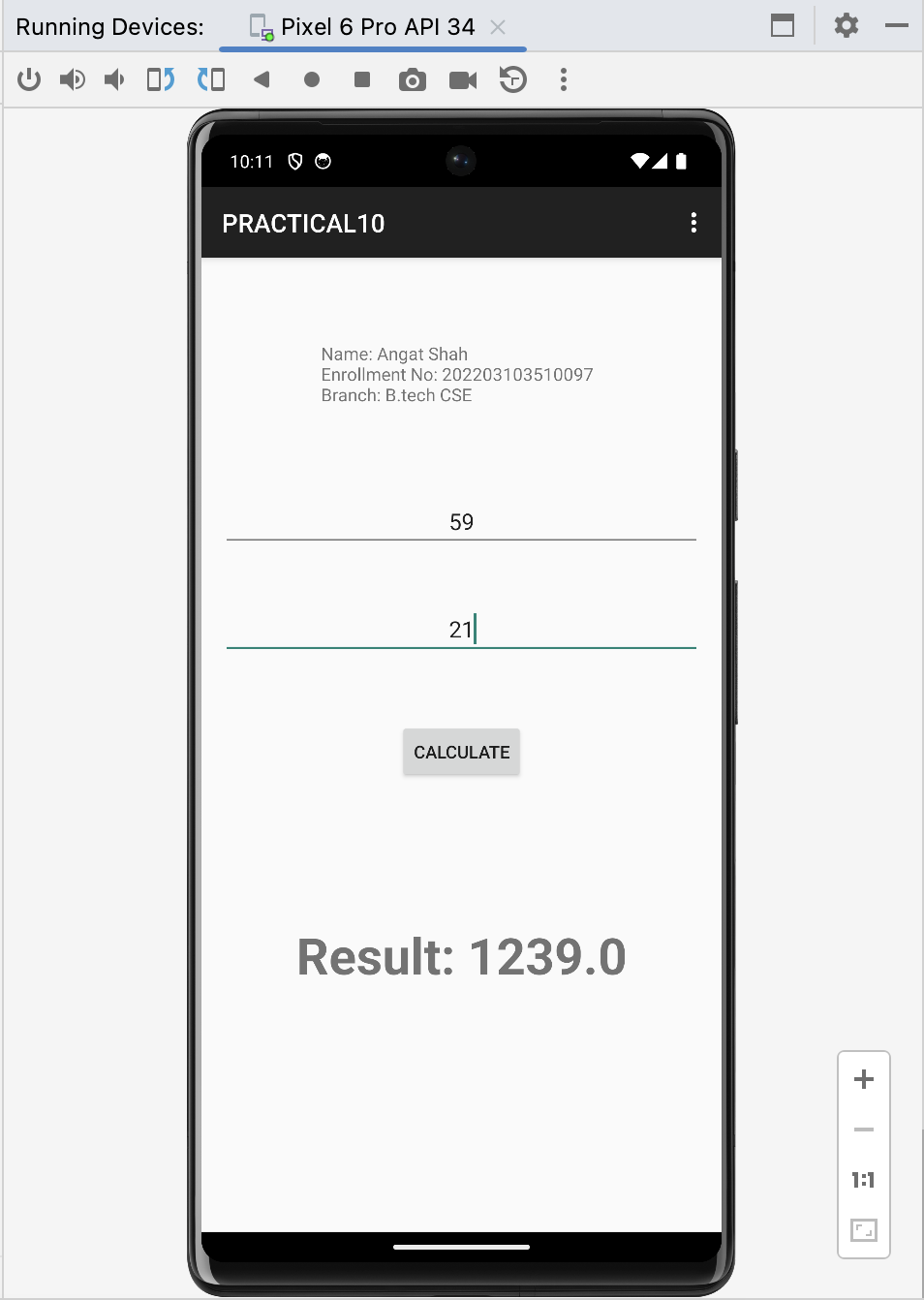
<item

android:id="@+id/menu\_multiplication"

android:title="Multiplication" />

</menu>

**Output:**

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