

## **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: Yash Patel\n Enrollment No: 202203103510228 \n Branch: B.tech  
CE(SE)"

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)**

Enrollment No: 202203103510097

```
<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:**

