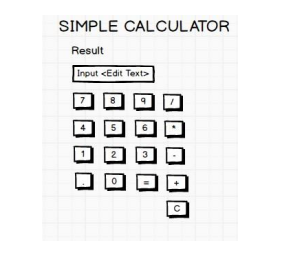
**MOBILE APPLICATION DEVELOPMENT**

**PROGRAM 2**

**Develop an Android application using controls like Button, TextView, EditText for designing a calculator having basic functionality like Addition, Subtraction, Multiplication, and Division.**



**XML CODE**

*<?***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"  
 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:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true" android:layout\_marginEnd="98dp"  
 android:layout\_marginBottom="653dp"  
 android:text="SIMPLE CALCI"  
 android:textSize="38dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintLeft\_toLeftOf="parent"  
 app:layout\_constraintRight\_toRightOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.042"** />  
 <**EditText  
 android:id="@+id/editText1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="115dp"  
 android:layout\_marginBottom="547dp"  
 android:ems="10"  
 android:hint="Enter the First Number"  
 android:inputType="textPersonName"  
 android:text=""** />  
 <**EditText  
 android:id="@+id/editText2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="111dp"  
 android:layout\_marginBottom="455dp"  
 android:ems="10"  
 android:inputType="textPersonName"  
 android:hint="Enter the Second Number"  
 android:text=""** />  
 <**TextView  
 android:id="@+id/textView1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="203dp"  
 android:layout\_marginBottom="350dp"  
 android:text="0"  
 android:textSize="40dp"** />  
 <**Button  
 android:id="@+id/button" android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="274dp"  
 android:layout\_marginBottom="237dp"  
 android:onClick="doAdd"  
 android:text="ADD"** />  
 <**Button  
 android:id="@+id/button2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="68dp"  
 android:layout\_marginBottom="233dp"  
 android:onClick="doSub"  
 android:text="SUB"** />  
 <**Button  
 android:id="@+id/button3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="277dp"  
 android:layout\_marginBottom="115dp"  
 android:onClick="doMul"  
 android:text="MUL"** />  
 <**Button  
 android:id="@+id/button4"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginEnd="63dp"  
 android:layout\_marginBottom="104dp"  
 android:onClick="doDiv"  
 android:text="DIV"** />  
</**RelativeLayout**>

**JAVA CODE**

**package** com.example.calc;  
**import** androidx.appcompat.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.EditText;  
**import** android.widget.TextView;**public class** MainActivity **extends** AppCompatActivity {  
 EditText **e1**,**e2**;  
 TextView **tv1**;  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 **e1** = (EditText)findViewById(R.id.***editText1***);  
 **e2** = (EditText)findViewById(R.id.***editText2***);  
 **tv1** = (TextView)findViewById(R.id.***textView1***);  
 }  
 **public void** doAdd(View V){  
 **int** a1 = Integer.*parseInt*(**e1**.getText().toString());  
 **int** a2 = Integer.*parseInt*(**e2**.getText().toString());  
 **int** result= a1+a2;  
 **tv1**.setText(**""**+result);  
 }  
 **public void** doSub(View V){  
 **int** a1 = Integer.*parseInt*(**e1**.getText().toString());  
 **int** a2 = Integer.*parseInt*(**e2**.getText().toString());  
 **int** result= a1-a2;  
 **tv1**.setText(**""**+result);  
 }  
 **public void** doMul(View V){  
 **int** a1 = Integer.*parseInt*(**e1**.getText().toString());  
 **int** a2 = Integer.*parseInt*(**e2**.getText().toString());  
 **int** result= a1\*a2;  
 **tv1**.setText(**""**+result);  
 }  
 **public void** doDiv(View V){  
 **int** a1 = Integer.*parseInt*(**e1**.getText().toString());  
 **int** a2 = Integer.*parseInt*(**e2**.getText().toString());  
 **float** result= a1/a2;  
 **tv1**.setText(**""**+result);  
 }  
}