**PROGRAM 3 - SIMPLE CALCULATOR**

**activity\_main.xml**

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 android:orientation="vertical">  
 <LinearLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:orientation="horizontal">  
 <EditText  
 android:id="@+id/ed1"  
 android:layout\_width="160dp"  
 android:layout\_height="wrap\_content"  
 android:hint="Num 1"/>  
 <EditText  
 android:id="@+id/ed2"  
 android:layout\_width="160dp"  
 android:layout\_height="wrap\_content"  
 android:hint="Num 2"/>  
 </LinearLayout>  
 <Button  
 android:layout\_height="wrap\_content"  
 android:layout\_width="120dp"  
 android:text="Add"  
 android:onClick="Add"/>  
 <Button  
 android:layout\_height="wrap\_content"  
 android:layout\_width="120dp"  
 android:text="Sub"  
 android:onClick="Sub"/>  
 <Button  
 android:layout\_height="wrap\_content"  
 android:layout\_width="120dp"  
 android:text="Mul"  
 android:onClick="Mul"/>  
 <Button  
 android:layout\_height="wrap\_content"  
 android:layout\_width="120dp"  
 android:text="Div"  
 android:onClick="Div"/>  
 <Button  
 android:id="@+id/clearButton"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:text="Clear"  
 android:onClick="Clear"/>  
 <LinearLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:orientation="horizontal" >  
 <TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Result:"  
 android:textSize="20sp"/>  
 <TextView  
 android:id="@+id/tv1"  
 android:layout\_width="160dp"  
 android:layout\_height="30dp" />  
 </LinearLayout>  
</LinearLayout>

**MainActivity.java**

package com.example.simplecalculator;  
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 ed1,ed2;  
 TextView tv1;  
 double num1,num2;  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 ed1 = findViewById(R.id.*ed1*);  
 ed2 = findViewById(R.id.*ed2*);  
 tv1= findViewById(R.id.*tv1*);  
 }  
 public void Clear(View view) {  
 ed1.setText("");  
 ed2.setText("");  
 tv1.setText("");  
 }  
 public void Add(View view) {  
 String num1str = ed1.getText().toString();  
 String num2str = ed2.getText().toString();  
 if (!num1str.isEmpty() && !num2str.isEmpty()) {  
 double num1 = Double.*parseDouble*(num1str);  
 double num2 = Double.*parseDouble*(num2str);  
 double result = num1 + num2;  
 tv1.setText(String.*valueOf*(result));  
 }  
 else  
 {  
 tv1.setText("Result: Invalid input");  
 }  
 }  
 public void Sub(View view) {  
 String num1str = ed1.getText().toString();  
 String num2str = ed2.getText().toString();  
 if (!num1str.isEmpty() && !num2str.isEmpty()) {  
  
 double num1 = Double.*parseDouble*(num1str);  
 double num2 = Double.*parseDouble*(num2str);  
 double result = num1 - num2;  
 tv1.setText(String.*valueOf*(result));  
 }  
 else  
 {  
 tv1.setText("Result: Invalid input");  
 }  
 }  
 public void Mul(View view) {  
 String num1str = ed1.getText().toString();  
 String num2str = ed2.getText().toString();  
 if (!num1str.isEmpty() && !num2str.isEmpty())  
 {  
 double num1 = Double.*parseDouble*(num1str);  
 double num2 = Double.*parseDouble*(num2str);  
 double result = num1 \* num2;  
 tv1.setText(String.*valueOf*(result));  
 }  
 else  
 {  
 tv1.setText("Result: Invalid input");  
 }  
 }  
 public void Div(View view) {  
 String num1str = ed1.getText().toString();  
 String num2str = ed2.getText().toString();  
 if (!num1str.isEmpty() && !num2str.isEmpty())  
 {  
 double num1 = Double.*parseDouble*(num1str);  
 double num2 = Double.*parseDouble*(num2str); if (num2 != 0) {  
 double result = num1 / num2;  
 tv1.setText(String.*valueOf*(result));  
 }  
 else  
 {  
 tv1.setText("Result: Division by zero");}  
  
 }  
 else  
 {  
 tv1.setText("Result: Invalid input");  
 }  
 }}

**OUTPUT**

