# MAIN.ACTIVITY:

package com.example.myapplication;

import android.os.Bundle; import android.widget.Button; import android.widget.EditText; import android.widget.TextView;

import androidx.activity.EdgeToEdge;

import androidx.appcompat.app.AppCompatActivity; import androidx.core.graphics.Insets;

import androidx.core.view.ViewCompat;

import androidx.core.view.WindowInsetsCompat;

public class MainActivity extends AppCompatActivity { TextView TV;

EditText E1,E2;

Button B1,B2,B3,B4,B5,B6;

private int result=0; @Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); EdgeToEdge.*enable*(this); setContentView(R.layout.*activity\_main*); E1=findViewById(R.id.*editTextText*); E2=findViewById(R.id.*editTextText2*); TV=findViewById(R.id.*textView4*);

B1=findViewById(R.id.*button*); B2=findViewById(R.id.*button2*); B3=findViewById(R.id.*button3*); B4=findViewById(R.id.*button4*); B5=findViewById(R.id.*button5*); B6=findViewById(R.id.*button6*);

B1.setOnClickListener(v -> performOperation('+')); B2.setOnClickListener(v -> performOperation('-')); B3.setOnClickListener(v -> performOperation('\*')); B4.setOnClickListener(v -> performOperation('/'));

B5.setOnClickListener(v -> performOperation('%')); B6.setOnClickListener(v -> TV.setText(String.*valueOf*((result))));

ViewCompat.*setOnApplyWindowInsetsListener*(findViewById(R.id.*main*), (v, insets) -> { Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.*systemBars*()); v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom); return insets;

});

}

private void performOperation(char operator){

try{

int num1=Integer.*parseInt*(E1.getText().toString()); int num2=Integer.*parseInt*(E2.getText().toString()); switch (operator){

case '+': result=num1+num2; break;

case '-':

result=num1-num2; break;

case '\*': result=num1\*num2; break;

case '/':

if(num2 !=0){ result=num1/num2;

}else{

TV.setText("error:devide by 0"); return;

}

break; case '%':

result=num1%num2; break;

}

}catch (NumberFormatException e){ TV.setText("error:invalid input");

}

}

}

# 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:id="@+id/main" android:layout\_width="match\_parent" android:layout\_height="match\_parent" tools:context=".MainActivity">

<TextView android:id="@+id/textView" android:layout\_width="199dp" android:layout\_height="45dp" android:layout\_marginTop="36dp" android:text="CALCULATOR" android:textSize="24sp"

app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintTop\_toTopOf="parent" />

<TextView android:id="@+id/textView2" android:layout\_width="91dp" android:layout\_height="81dp" android:layout\_marginTop="60dp"

android:text="ENTER THE FIRST NUMBER" app:layout\_constraintEnd\_toStartOf="@+id/editTextText" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintTop\_toBottomOf="@+id/textView" />

<TextView android:id="@+id/textView3" android:layout\_width="84dp" android:layout\_height="74dp" android:layout\_marginTop="28dp"

android:text="ENTER THE SECOND NUMBER" app:layout\_constraintEnd\_toStartOf="@+id/editTextText2" app:layout\_constraintHorizontal\_bias="0.441" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintTop\_toBottomOf="@+id/textView2" />

<EditText android:id="@+id/editTextText" android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content" android:layout\_marginTop="80dp" android:layout\_marginEnd="44dp" android:ems="10" android:inputType="text"

app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintTop\_toBottomOf="@+id/textView" />

<EditText android:id="@+id/editTextText2" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_marginTop="60dp" android:layout\_marginEnd="40dp" android:ems="10" android:inputType="text"

app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintTop\_toBottomOf="@+id/editTextText" />

<TextView android:id="@+id/textView4" android:layout\_width="222dp" android:layout\_height="37dp" android:layout\_marginTop="72dp"

app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintTop\_toBottomOf="@+id/editTextText2" />

<Button

android:id="@+id/button" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_marginTop="60dp" android:text="+" android:textSize="24sp"

app:layout\_constraintEnd\_toStartOf="@+id/button2" app:layout\_constraintHorizontal\_bias="0.523" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintTop\_toBottomOf="@+id/textView4" />

<Button android:id="@+id/button2"

android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_marginTop="60dp" android:layout\_marginEnd="28dp" android:text="-" android:textSize="24sp"

app:layout\_constraintEnd\_toStartOf="@+id/button3" app:layout\_constraintTop\_toBottomOf="@+id/textView4" />

<Button android:id="@+id/button3"

android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_marginTop="60dp" android:layout\_marginEnd="36dp" android:text="\*" android:textSize="24sp"

app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintTop\_toBottomOf="@+id/textView4" />

<Button android:id="@+id/button4"

android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_marginTop="40dp" android:text="/" android:textSize="24sp"

app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintEnd\_toStartOf="@+id/button5" app:layout\_constraintHorizontal\_bias="0.526" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintTop\_toBottomOf="@+id/button" app:layout\_constraintVertical\_bias="0.086" />

<Button android:id="@+id/button5"

android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_marginTop="40dp" android:layout\_marginEnd="28dp"

android:text="%" android:textSize="24sp"

app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintEnd\_toStartOf="@+id/button6" app:layout\_constraintTop\_toBottomOf="@+id/button2" app:layout\_constraintVertical\_bias="0.086" />

<Button android:id="@+id/button6"

android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_marginTop="40dp" android:layout\_marginEnd="36dp" android:text="=" android:textSize="24sp"

app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintTop\_toBottomOf="@+id/button3" app:layout\_constraintVertical\_bias="0.086" />

</androidx.constraintlayout.widget.ConstraintLayout>