Create a calculator program using android studio

ActivityMain.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:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity">

<TableLayout

android:layout\_width="300dp"

android:layout\_height="300dp"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/editTextNumber2">

<TableRow

android:layout\_width="match\_parent"

android:layout\_height="match\_parent">

<Button

android:id="@+id/btn7"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="btn7Click"

android:text="7" />

<Button

android:id="@+id/btn8"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="btn8Click"

android:text="8" />

<Button

android:id="@+id/btn9"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="btn9Click"

android:text="9" />

</TableRow>

<TableRow

android:layout\_width="match\_parent"

android:layout\_height="match\_parent">

<Button

android:id="@+id/btn4"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="btn4Click"

android:text="4" />

<Button

android:id="@+id/btn5"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="btn5Click"

android:text="5" />

<Button

android:id="@+id/btn6"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="btn6Click"

android:text="6" />

</TableRow>

<TableRow

android:layout\_width="match\_parent"

android:layout\_height="match\_parent">

<Button

android:id="@+id/btn1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="btn1Click"

android:text="1" />

<Button

android:id="@+id/btn2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="btn2Click"

android:text="2" />

<Button

android:id="@+id/btn3"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="btn3Click"

android:text="3" />

</TableRow>

<TableRow

android:layout\_width="match\_parent"

android:layout\_height="match\_parent">

<Button

android:id="@+id/btn0"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="btn0Click"

android:text="0" />

<Button

android:id="@+id/btnPlus"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="btnPlusClick"

android:text="+" />

<Button

android:id="@+id/btnMinus"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="btnMinusClick"

android:text="-" />

</TableRow>

<TableRow

android:layout\_width="match\_parent"

android:layout\_height="match\_parent">

<Button

android:id="@+id/btnMul"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="btnMulClick"

android:text="x" />

<Button

android:id="@+id/btnDiv"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="btnDivClick"

android:text="/" />

<Button

android:id="@+id/btnEq"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="btnEqualClick"

android:text="=" />

</TableRow>

<TableRow

android:layout\_width="match\_parent"

android:layout\_height="match\_parent">

<Button

android:id="@+id/btnClr"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="btnClearClick"

android:text="Clear" />

</TableRow>

</TableLayout>

<EditText

android:id="@+id/editTextNumber2"

android:layout\_width="300dp"

android:layout\_height="48dp"

android:layout\_marginTop="50dp"

android:ems="10"

android:inputType="number"

android:hint="Value"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>

MainActivity.java

package com.example.calculator;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

EditText ed1;

Button btn1, btn2, btn3, btn4, btn5, btn6, btn7, btn8, btn9, btn0, btnPlus, btnMinus, btnMul, btnDiv, btnClr;

String val1 = "";

String val2 = "";

String operator = "";

int result;

Boolean oper = false;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

ed1 = findViewById(R.id.editTextNumber2);

btn0 = findViewById(R.id.btn0);

btn1 = findViewById(R.id.btn1);

btn2 = findViewById(R.id.btn2);

btn3 = findViewById(R.id.btn3);

btn4 = findViewById(R.id.btn4);

btn5 = findViewById(R.id.btn5);

btn6 = findViewById(R.id.btn6);

btn7 = findViewById(R.id.btn7);

btn8 = findViewById(R.id.btn8);

btn9 = findViewById(R.id.btn9);

btnPlus = findViewById(R.id.btnPlus);

btnMinus = findViewById(R.id.btnMinus);

btnMul = findViewById(R.id.btnMul);

btnDiv = findViewById(R.id.btnDiv);

btnClr = findViewById(R.id.btnClr);

}

public void btn0Click(View view){

if(oper){

val2 += 0;

ed1.setText(val2);

}else{

val1 += 0;

ed1.setText(val1);

}

}

public void btn1Click(View view){

if(oper){

val2 += 1;

ed1.setText(val2);

}else{

val1 += 1;

ed1.setText(val1);

}

}

public void btn2Click(View view){

if(oper){

val2 += 2;

ed1.setText(val2);

}else{

val1 += 2;

ed1.setText(val1);

}

}

public void btn3Click(View view){

if(oper){

val2 += 3;

ed1.setText(val2);

}else{

val1 += 3;

ed1.setText(val1);

}

}

public void btn4Click(View view){

if(oper){

val2 += 4;

ed1.setText(val2);

}else{

val1 += 4;

ed1.setText(val1);

}

}

public void btn5Click(View view){

if(oper){

val2 += 5;

ed1.setText(val2);

}else{

val1 += 5;

ed1.setText(val1);

}

}

public void btn6Click(View view){

if(oper){

val2 += 6;

ed1.setText(val2);

}else{

val1 += 6;

ed1.setText(val1);

}

}

public void btn7Click(View view){

if(oper){

val2 += 7;

ed1.setText(val2);

}else{

val1 += 7;

ed1.setText(val1);

}

}

public void btn8Click(View view){

if(oper){

val2 += 8;

ed1.setText(val2);

}else{

val1 += 8;

ed1.setText(val1);

}

}

public void btn9Click(View view){

if(oper){

val2 += 9;

ed1.setText(val2);

}else{

val1 += 9;

ed1.setText(val1);

}

}

public void btnPlusClick(View view){

oper = Boolean.TRUE;

operator = "+";

ed1.setText("");

}

public void btnMinusClick(View view){

oper = Boolean.TRUE;

operator = "-";

ed1.setText("");

}

public void btnMulClick(View view){

oper = Boolean.TRUE;

operator = "\*";

ed1.setText("");

}

public void btnDivClick(View view){

oper = Boolean.TRUE;

operator = "/";

ed1.setText("");

}

public void btnClearClick(View view){

ed1.setText("");

val1 = "";

val2 = "";

operator = "";

}

public void btnEqualClick(View view){

switch (operator){

case "+":

int operand1 = Integer.parseInt(val1);

int operand2 = Integer.parseInt(val2);

result = operand1 + operand2;

ed1.setText(String.valueOf(result));

break;

case "-":

int operand12 = Integer.parseInt(val1);

int operand22 = Integer.parseInt(val2);

result = operand12 - operand22;

ed1.setText(String.valueOf(result));

break;

case "\*":

int operand13 = Integer.parseInt(val1);

int operand23 = Integer.parseInt(val2);

result = operand13 \* operand23;

ed1.setText(String.valueOf(result));

break;

case "/":

int operand14 = Integer.parseInt(val1);

int operand24 = Integer.parseInt(val2);

result = operand14 / operand24;

ed1.setText(String.valueOf(result));

break;

}

}

}

Output:  
 

 