1] Mainactivity

package com.example.sujay171;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle; import android.view.View; import android.widget.Button; import android.widget.EditText;

public class MainActivity extends AppCompatActivity implements

View.OnClickListener {

Button one, two, three, four, five, six, seven, eight, nine;

Button add, sub, div, mul, clear, equals;

EditText res;

String operatorPressed = " ";

@Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.*activity\_main*); res= findViewById(R.id.*res*); *//EditText*

one = findViewById(R.id.*one*);

two = findViewById(R.id.*two*); three = findViewById(R.id.*three*); four = findViewById(R.id.*four*); five = findViewById(R.id.*five*); six = findViewById(R.id.*six*); seven = findViewById(R.id.*seven*); eight = findViewById(R.id.*eight*); nine = findViewById(R.id.*nine*); clear = findViewById(R.id.*clear*); sub = findViewById(R.id.*sub*); add = findViewById(R.id.*add*); mul = findViewById(R.id.*mul*); div = findViewById(R.id.*div*); equals = findViewById(R.id.*equals*);

one.setOnClickListener(this); two.setOnClickListener(this); three.setOnClickListener(this); four.setOnClickListener(this); five.setOnClickListener(this); six.setOnClickListener(this); seven.setOnClickListener(this); eight.setOnClickListener(this); nine.setOnClickListener(this);

*// operators* add.setOnClickListener(this); sub.setOnClickListener(this); mul.setOnClickListener(this); div.setOnClickListener(this); equals.setOnClickListener(this); clear.setOnClickListener(this);

}

@Override public void onClick(View view) {

double finalResult = 0.0; switch(view.getId())

{ case R.id.*one*: res.append("1"); break;

case R.id.*two*: res.append("2"); break;

case R.id.*three*: res.append("3"); break;

case R.id.*four*: res.append("4"); break;

case R.id.*five*: res.append("5"); break;

case R.id.*six*: res.append("6"); break;

case R.id.*seven*: res.append("7"); break;

case R.id.*eight*: res.append("8"); break;

case R.id.*nine*: res.append("9"); break;

case R.id.*add*: res.append("+");

operatorPressed="+"; break;

case R.id.*sub*: res.append("-");

operatorPressed="-"; break;

case R.id.*mul*: res.append("\*");

operatorPressed="\*"; break;

case R.id.*div*: res.append("/");

operatorPressed="/"; break;

case R.id.*clear*: res.setText(" ");

break;

case R.id.*equals*: finalResult=

evaluateExpression(res.getText().toString(),operatorPressed);

res.setText(String.*valueOf*(finalResult)); break;

default:return; }

} private double evaluateExpression(String res, String operatorPressed)

{

String[] tokens = res.split("\\+|-|\\\*|\\/");

double firstOperand = Double.*parseDouble*(tokens[0]); double secondOperand = Double.*parseDouble*(tokens[1]); switch(operatorPressed)

{ case "+": return firstOperand + secondOperand; case "-": return firstOperand - secondOperand; case "\*": return firstOperand \* secondOperand; case "/": return firstOperand / secondOperand; default: return 0;

}

}

}

# 2]XML

*<?*xml version="1.0" encoding="utf-8"*?>*

<LinearLayout 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" android:orientation="vertical" android:background="@color/white">

<TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Calculator" app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintLeft\_toLeftOf="parent" app:layout\_constraintRight\_toRightOf="parent" app:layout\_constraintTop\_toTopOf="parent" />

<TextView android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:layout\_marginTop="60dp" android:id="@+id/label" android:text="CALCULATOR" android:textSize="30dp" android:textColor="@color/black" android:gravity="center"

/>

<EditText android:id="@+id/res" android:layout\_width="match\_parent" android:layout\_height="172dp" android:layout\_margin="30dp" android:backgroundTint="#FDD835" android:backgroundTintMode="src\_over" android:gravity="end" android:hint="0" android:textSize="20dp" />

<LinearLayout android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:orientation="horizontal" android:layout\_marginLeft="20dp" android:layout\_marginRight="20dp" android:layout\_marginBottom="20dp">

<Button android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="9" android:textSize="20dp" android:id="@+id/nine" android:background="@color/white" android:layout\_weight="0.25"

/>

<Button android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="8" android:textSize="20dp" android:background="@color/white" android:id="@+id/eight" android:layout\_weight="0.25"

/>

<Button android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="7" android:textSize="20dp" android:background="@color/white" android:id="@+id/seven" android:layout\_weight="0.25"

/>

<Button android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="C" android:textSize="20dp" android:background="@color/white" android:id="@+id/clear" android:layout\_weight="0.25"

/>

</LinearLayout>

<LinearLayout android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:orientation="horizontal" android:layout\_marginLeft="20dp" android:layout\_marginRight="20dp" android:layout\_marginBottom="20dp">

<Button android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="6" android:textSize="20dp" android:id="@+id/six" android:background="@color/white" android:layout\_weight="0.25"

/>

<Button android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="5" android:textSize="20dp" android:background="@color/white" android:id="@+id/five" android:layout\_weight="0.25"

/>

<Button android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="4" android:textSize="20dp" android:background="@color/white" android:id="@+id/four" android:layout\_weight="0.25"

/>

<Button android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="+" android:textSize="20dp" android:background="@color/white" android:id="@+id/add" android:layout\_weight="0.25"

/>

</LinearLayout>

<LinearLayout android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:orientation="horizontal" android:layout\_marginLeft="20dp" android:layout\_marginRight="20dp" android:layout\_marginBottom="20dp">

<Button android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="3" android:textSize="20dp" android:id="@+id/three" android:background="@color/white" android:layout\_weight="0.25"

/>

<Button android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="2" android:textSize="20dp" android:background="@color/white" android:id="@+id/two" android:layout\_weight="0.25"

/>

<Button android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="1" android:textSize="20dp" android:background="@color/white" android:id="@+id/one" android:layout\_weight="0.25"

/>

<Button android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="-" android:textSize="20dp" android:background="@color/white" android:id="@+id/sub" android:layout\_weight="0.25"

/>

</LinearLayout>

<LinearLayout android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:orientation="horizontal" android:layout\_marginLeft="20dp" android:layout\_marginRight="20dp" android:layout\_marginBottom="20dp">

<Button android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_weight="0.25" android:background="@color/white" android:text="/" android:textSize="20dp" android:id="@+id/div" />

<Button android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="0" android:textSize="20dp" android:background="@color/white" android:id="@+id/zero" android:layout\_weight="0.25"

/>

<Button android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="\*" android:textSize="20dp" android:background="@color/white" android:id="@+id/mul" android:layout\_weight="0.25"

/>

<Button android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="=" android:textSize="20dp" android:background="@color/white" android:id="@+id/equals" android:layout\_weight="0.25"

/>

</LinearLayout>

</LinearLayout>

