**Program No:9** **28.10.2022**

Design a simple calculator using GridLayout.

**Program Code:**

**activity.xml:**

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

<GridLayout 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"

android:orientation="vertical"

tools:context=".MainActivity">

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="1st number"

android:layout\_row="0"

android:layout\_column="0"/>

<EditText

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/et1"

android:layout\_row="1"

android:layout\_column="0"/>

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="2nd number"

android:layout\_row="2"

android:layout\_column="0"/>

<EditText

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/et2"

android:layout\_row="3"

android:layout\_column="0"/>

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/txt1"

android:layout\_row="4"

android:layout\_column="0"/>

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/b1"

android:text="ADD"

android:layout\_row="5"

android:layout\_column="0"/>

<Button

android:id="@+id/b2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_row="5"

android:layout\_column="1"

android:text="SUB" />

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/b3"

android:text="MUL"

android:layout\_row="5"

android:layout\_column="2"/>

<Button

android:id="@+id/b4"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_row="5"

android:layout\_column="3"

android:text="DIV" />

</GridLayout>

**mainactivity.java:**

package com.example.myapplication;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

Button b1=findViewById(R.id.b1);

Button b2=findViewById(R.id.b2);

Button b3=findViewById(R.id.b3);

Button b4=findViewById(R.id.b4);

EditText et1=findViewById(R.id.et1);

EditText et2=findViewById(R.id.et2);

TextView txt1=findViewById(R.id.txt1);

b1.setOnClickListener(new View.OnClickListener(){

@Override

public void onClick(View view){

Double a1=Double.parseDouble(et1.getText().toString());

Double a2=Double.parseDouble(et2.getText().toString());

Double r=a1+a2;

txt1.setText("Result="+String.valueOf(r));

}

});

b2.setOnClickListener(new View.OnClickListener(){

@Override

public void onClick(View view){

Double a1=Double.parseDouble(et1.getText().toString());

Double a2=Double.parseDouble(et2.getText().toString());

Double r=a1-a2;

txt1.setText("Result="+String.valueOf(r));

}

});

b3.setOnClickListener(new View.OnClickListener(){

@Override

public void onClick(View view){

Double a1=Double.parseDouble(et1.getText().toString());

Double a2=Double.parseDouble(et2.getText().toString());

Double r=a1\*a2;

txt1.setText("Result="+String.valueOf(r));

}

});

b4.setOnClickListener(new View.OnClickListener(){

@Override

public void onClick(View view){

Double a1=Double.parseDouble(et1.getText().toString());

Double a2=Double.parseDouble(et2.getText().toString());

Double r=a1/a2;

txt1.setText("Result="+String.valueOf(r));

}

});

}

}

**Output**

