Program:

Grid Calculator

mainActivity.java

package com.example.co22;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.TextView;  
  
public class MainActivity extends AppCompatActivity implements View.OnClickListener {  
  
  
 TextView number;  
 double n1=0,n2=0;  
 String op="";  
 Button b1,b2,b3,b4,b5,b6,b7,b8,b9,b0,b\_add,b\_mul,b\_sub,b\_div,b\_clr,b\_eq;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 number=findViewById(R.id.*t\_view*);  
 b1=findViewById(R.id.*btn1*);  
 b2=findViewById(R.id.*btn2*);  
 b3=findViewById(R.id.*btn3*);  
 b4=findViewById(R.id.*btn4*);  
 b5=findViewById(R.id.*btn5*);  
 b6=findViewById(R.id.*btn6*);  
 b7=findViewById(R.id.*btn7*);  
 b8=findViewById(R.id.*btn8*);  
 b9=findViewById(R.id.*btn9*);  
 b0=findViewById(R.id.*btn0*);  
 b\_add=findViewById(R.id.*b\_add*);  
 b\_clr=findViewById(R.id.*b\_clr*);  
 b\_div=findViewById(R.id.*b\_div*);  
 b\_mul=findViewById(R.id.*b\_mul*);  
 b\_sub=findViewById(R.id.*b\_sub*);  
 b\_clr=findViewById(R.id.*b\_clr*);  
 b\_eq=findViewById(R.id.*b\_eq*);  
  
  
  
  
 b1.setOnClickListener(this);  
 b2.setOnClickListener(this);  
 b3.setOnClickListener(this);  
 b4.setOnClickListener(this);  
 b5.setOnClickListener(this);  
 b6.setOnClickListener(this);  
 b7.setOnClickListener(this);  
 b8.setOnClickListener(this);  
 b9.setOnClickListener(this);  
 b0.setOnClickListener(this);  
 b\_add.setOnClickListener(this);  
 b\_sub.setOnClickListener(this);  
 b\_mul.setOnClickListener(this);  
 b\_div.setOnClickListener(this);  
 b\_clr.setOnClickListener(this);  
 b\_eq.setOnClickListener(this);  
  
  
  
 }  
  
 @Override  
 public void onClick(View view){  
 Button b=(Button) view;  
 if(view==b\_clr)  
 {  
 number.setText("");  
 }  
 else if(view==b\_add || view==b\_mul || view==b\_div || view==b\_sub )  
 {  
 n1=Integer.*parseInt*(number.getText().toString());  
 op=b.getText().toString();  
 number.setText("");  
 }  
 else if(view == b\_eq)  
 {  
 n2=Integer.*parseInt*(number.getText().toString());  
 if(op.equals("+"))  
 {  
 number.setText(n1+n2+"");  
 }  
 else if(op.equals("-"))  
 {  
 number.setText(n1-n2+"");  
 }  
 else if(op.equals("/"))  
 {  
 number.setText(n1/n2+"");  
 }  
 else if(op.equals("\*"))  
 {  
 number.setText(n1\*n2+"");  
 }  
 }  
 else  
 {  
 String s=number.getText().toString();  
 number.setText(s+b.getText().toString());  
 }  
  
  
 }  
}

activity\_main.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"  
 android:orientation="vertical"  
 tools:context=".MainActivity">  
  
 <LinearLayout  
 android:layout\_width="408dp"  
 android:layout\_height="84dp"  
 android:orientation="vertical"  
 tools:ignore="MissingConstraints"  
 tools:layout\_editor\_absoluteX="3dp"  
 tools:layout\_editor\_absoluteY="1dp">  
  
 <EditText  
 android:id="@+id/t\_view"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:hint="......"  
 android:inputType="textPersonName" />  
 </LinearLayout>  
  
 <androidx.gridlayout.widget.GridLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="268dp"  
 android:layout\_gravity="center"  
 tools:layout\_editor\_absoluteX="3dp"  
 tools:layout\_editor\_absoluteY="87dp">  
  
 <Button  
 android:id="@+id/btn1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="66dp"  
 android:text="1"  
 android:textSize="20sp"  
 app:layout\_column="0"  
 app:layout\_row="0" />  
  
 <Button  
 android:id="@+id/btn2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="65dp"  
 android:text="2"  
 android:textSize="20sp"  
 app:layout\_column="1"  
 app:layout\_row="0" />  
  
 <Button  
 android:id="@+id/btn3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="66dp"  
 android:text="3"  
 android:textSize="20sp"  
 app:layout\_column="2"  
 app:layout\_row="0" />  
  
 <Button  
 android:id="@+id/b\_add"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="65dp"  
 android:text="+"  
 android:textSize="20sp"  
 app:layout\_column="3"  
 app:layout\_row="0" />  
  
 <Button  
 android:id="@+id/btn4"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="61dp"  
 android:text="4"  
 android:textSize="20sp"  
 app:layout\_column="0"  
 app:layout\_row="1" />  
  
 <Button  
 android:id="@+id/btn5"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="61dp"  
 android:text="5"  
 android:textSize="20sp"  
 app:layout\_column="1"  
 app:layout\_row="1" />  
  
 <Button  
 android:id="@+id/btn6"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="61dp"  
 android:text="6"  
 android:textSize="20sp"  
 app:layout\_column="2"  
 app:layout\_row="1" />  
  
 <Button  
 android:id="@+id/b\_sub"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="61dp"  
 android:text="-"  
 android:textSize="20sp"  
 app:layout\_column="3"  
 app:layout\_row="1" />  
  
 <Button  
 android:id="@+id/btn7"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="60dp"  
 android:text="7"  
 android:textSize="20sp"  
 app:layout\_column="0"  
 app:layout\_row="2" />  
  
 <Button  
 android:id="@+id/btn8"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="60dp"  
 android:text="8"  
 android:textSize="20sp"  
 app:layout\_column="1"  
 app:layout\_row="2" />  
  
 <Button  
 android:id="@+id/btn9"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="62dp"  
 android:text="9"  
 android:textSize="20sp"  
 app:layout\_column="2"  
 app:layout\_row="2" />  
  
 <Button  
 android:id="@+id/btn0"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="60dp"  
 android:text="0"  
 android:textSize="20sp"  
 app:layout\_column="1"  
 app:layout\_row="3" />  
  
 <Button  
 android:id="@+id/b\_mul"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="63dp"  
 android:text="\*"  
 android:textSize="20sp"  
 app:layout\_column="3"  
 app:layout\_row="2" />  
  
 <Button  
 android:id="@+id/b\_div"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="59dp"  
 android:text="/"  
 android:textSize="20sp"  
 app:layout\_column="2"  
 app:layout\_row="3" />  
  
 <Button  
 android:id="@+id/b\_eq"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="62dp"  
 android:text="="  
 android:textSize="20sp"  
 app:layout\_column="3"  
 app:layout\_row="3" />  
  
 <Button  
 android:id="@+id/b\_clr"  
 android:layout\_width="85dp"  
 android:layout\_height="60dp"  
 android:text="CLEAR"  
 android:textSize="14sp"  
 app:layout\_column="0"  
 app:layout\_row="3" />  
 </androidx.gridlayout.widget.GridLayout>  
</LinearLayout>

Output:

