**PROGRAM No: 09 Date:28-10-2022**

**Aim: Define simple calculator using grid layout.**

**Program Code:**

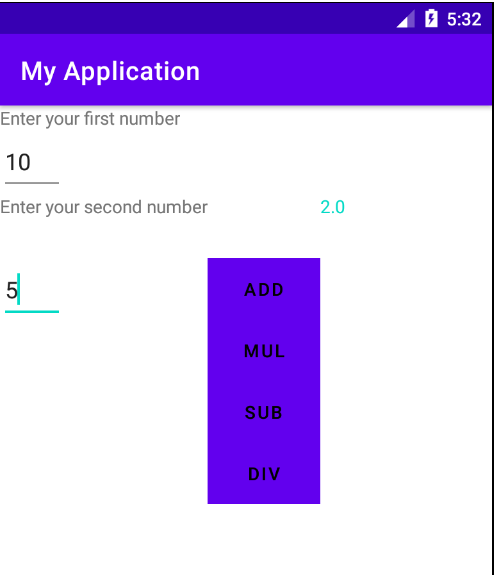
**Activity.xml :**

*<?*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"  
 tools:context=".MainActivity">  
  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Enter your first number"  
 android:layout\_row="0"  
 android:layout\_column="0" />  
 <EditText  
 android:layout\_width="50dp"  
 android:layout\_height="50dp"  
 android:id="@+id/n1"  
 android:layout\_row="1"  
 android:layout\_column="0"/>  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Enter your second number"  
 android:layout\_row="2"  
 android:layout\_column="0"/>  
 <EditText  
 android:layout\_width="50dp"  
 android:layout\_height="50dp"  
 android:id="@+id/n2"  
 android:layout\_row="3"  
 android:layout\_column="0" />  
 <LinearLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:orientation="vertical">  
  
  
 <Button  
 android:text="ADD"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_row="4"  
 android:layout\_column="0"  
 android:textColor="@color/black"  
 android:background="@color/design\_default\_color\_primary"  
 android:id="@+id/add"/>  
 <Button  
 android:text="MUL"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_row="4"  
 android:layout\_column="1"  
 android:textColor="@color/black"  
 android:background="@color/design\_default\_color\_primary"  
 android:id="@+id/mul"/>  
  
 <Button  
 android:text="SUB"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_row="4"  
 android:layout\_column="2"  
 android:textColor="@color/black"  
 android:background="@color/design\_default\_color\_primary"  
 android:id="@+id/sub"/>  
 <Button  
 android:text="DIV"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_row="4"  
 android:layout\_column="3"  
 android:textColor="@color/black"  
 android:background="@color/design\_default\_color\_primary"  
 android:id="@+id/div"/>  
 </LinearLayout>  
 <TextView  
 android:hint="RESULT"  
 android:layout\_width="70dp"  
 android:layout\_height="50dp"  
 android:layout\_row="2"  
 android:layout\_column="2"  
 android:id="@+id/result"  
 android:textColor="@color/design\_default\_color\_secondary"/>  
  
</GridLayout>

**Mainactivity**

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*);  
 final EditText a=findViewById(R.id.*n1*) ;  
 final EditText b=findViewById(R.id.*n2*);  
 Button add=findViewById(R.id.*add*);  
 Button sub=findViewById(R.id.*sub*);  
 Button mul=findViewById(R.id.*mul*);  
 Button div=findViewById(R.id.*div*);  
 final TextView result=findViewById(R.id.*result*);  
 add.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 Double n1=Double.*parseDouble*(a.getText().toString());  
 Double n2=Double.*parseDouble*(b.getText().toString());  
 Double r=n1+n2;  
 result.setText(String.*valueOf*(r));  
 }  
 } );  
  
 sub.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 Double n1=Double.*parseDouble*(a.getText().toString());  
 Double n2=Double.*parseDouble*(b.getText().toString());  
 Double r=n1-n2;  
 result.setText(String.*valueOf*(r));  
 }  
 });  
 mul.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 Double n1=Double.*parseDouble*(a.getText().toString());  
 Double n2=Double.*parseDouble*(b.getText().toString());  
 Double r=n1\*n2;  
 result.setText(String.*valueOf*(r));  
 }  
 });  
 div.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 Double n1=Double.*parseDouble*(a.getText().toString());  
 Double n2=Double.*parseDouble*(b.getText().toString());  
 Double r=n1/n2;  
 result.setText(String.*valueOf*(r));  
 }  
 });  
} }

**OUTPUT**

****