Xml :

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout 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:background="#2B2929">
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text=""
        android:id="@+id/no01"
        android:textSize="40dp"
        android:layout_marginTop="10dp"
        android:layout_marginRight="10dp"
        android:textColor="@color/white"
        android:layout_toLeftOf="@id/no03"
        android:layout_above="@id/no02"/>
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text=""
        android:id="@+id/no02"
        android:layout_alignParentRight="true"
        android:textSize="40dp"
        android:layout_marginTop="5dp"
        android:layout_marginRight="10dp"
        android:textColor="@color/white"
        android:layout_above="@id/buttons"/>
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text=""
        android:id="@+id/no03"
        android:layout_alignParentRight="true"
        android:textSize="40dp"
        android:layout_marginTop="5dp"
        android:layout_marginRight="10dp"
        android:textColor="@color/white"
        android:layout_above="@id/no02"/>
    <RelativeLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="10dp"
        android:padding="1dp"
        android:id="@+id/buttons"
        android:layout_alignParentBottom="true"
```

```xml
        android:layout_marginBottom="10dp">
<GridLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:columnCount="4"
    android:layout_marginBottom="1dp"
    android:id="@+id/row1">
    <Button
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:id="@+id/allclr"
        android:layout_margin="1dp"
        android:background="@drawable/back"
        android:text="AC"
        android:textSize="30dp"
        android:textStyle="bold"
        android:textColor="@color/black"/>
    <Button
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:id="@+id/clr"
        android:layout_margin="1dp"
        android:background="@drawable/back"
        android:text="C"
        android:textSize="30dp"
        android:textStyle="bold"
        android:textColor="@color/black"/>
    <Button
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:id="@+id/mod"
        android:layout_margin="1dp"
        android:background="@drawable/back"

        android:text="%"
        android:textSize="30dp"
        android:textStyle="bold"
        android:textColor="@color/black"/>
    <Button
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:id="@+id/div"
        android:layout_margin="1dp"
        android:text="/"
        android:textSize="30dp"
        android:textStyle="bold"
        android:textColor="@color/black"
        android:background="@drawable/back"/>

</GridLayout>
```

```xml
<GridLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:columnCount="4"
    android:layout_below="@id/row1"
    android:layout_marginBottom="1dp"
    android:id="@+id/row2">


    <Button
        android:id="@+id/num7"
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:layout_margin="1dp"
        android:layout_marginStart="1dp"
        android:layout_marginTop="1dp"
        android:layout_marginEnd="1dp"
        android:layout_marginBottom="1dp"
        android:background="@drawable/back"
        android:text="7"
        android:textSize="30dp"
        android:textStyle="bold"
        android:textColor="@color/white"/>

    <Button
        android:id="@+id/num8"
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:layout_margin="1dp"
        android:layout_marginStart="1dp"
        android:layout_marginTop="1dp"
        android:layout_marginEnd="1dp"
        android:layout_marginBottom="1dp"
        android:background="@drawable/back"
        android:text="8"
        android:textSize="30dp"
        android:textStyle="bold"
        android:textColor="@color/white"/>

    <Button
        android:id="@+id/num9"
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:layout_margin="1dp"
        android:layout_marginStart="1dp"
        android:layout_marginTop="1dp"
        android:layout_marginEnd="1dp"
        android:layout_marginBottom="1dp"
        android:background="@drawable/back"
```

```xml
        android:text="9"
        android:textSize="30dp"
        android:textStyle="bold"
        android:textColor="@color/white"/>

    <Button
        android:id="@+id/mul"
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:layout_margin="1dp"
        android:layout_marginStart="1dp"
        android:layout_marginTop="1dp"
        android:layout_marginEnd="1dp"
        android:layout_marginBottom="1dp"
        android:background="@drawable/back"
        android:text="x"
        android:textSize="30dp"
        android:textStyle="bold"
        android:textColor="@color/black" />
</GridLayout>
<GridLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:columnCount="4"
    android:layout_marginBottom="1dp"
    android:layout_below="@id/row2"
    android:id="@+id/row3">


    <Button
        android:id="@+id/num4"
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:layout_margin="1dp"
        android:background="@drawable/back"
        android:text="4"
        android:textSize="30dp"
        android:textStyle="bold"
        android:textColor="@color/white"
        />
    <Button
        android:id="@+id/num5"
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:layout_margin="1dp"
        android:background="@drawable/back"
        android:text="5"
        android:textSize="30dp"
        android:textStyle="bold"
        android:textColor="@color/white"
```

```xml
        />

    <Button
        android:id="@+id/num6"
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:layout_margin="1dp"
        android:background="@drawable/back"
        android:text="6"
        android:textSize="30dp"
        android:textStyle="bold"
        android:textColor="@color/white"
        />

    <Button
        android:id="@+id/min"
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:layout_margin="1dp"
        android:background="@drawable/back"
        android:text="-"
        android:textSize="30dp"
        android:textStyle="bold"
        android:textColor="@color/black" />
</GridLayout>
<GridLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:columnCount="4"
    android:layout_marginBottom="1dp"
    android:layout_below="@id/row3"
    android:id="@+id/row4">

    <Button
        android:id="@+id/num1"
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:layout_margin="1dp"
        android:background="@drawable/back"
        android:text="1"
        android:textSize="30dp"
        android:textStyle="bold"
        android:textColor="@color/white"
        />
    <Button
        android:id="@+id/num2"
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:layout_margin="1dp"
```

```xml
            android:background="@drawable/back"
            android:text="2"
            android:textSize="30dp"
            android:textStyle="bold"
            android:textColor="@color/white"
            />

        <Button
            android:id="@+id/num3"
            android:layout_width="100dp"
            android:layout_height="100dp"
            android:layout_margin="1dp"
            android:background="@drawable/back"
            android:text="3"
            android:textSize="30dp"
            android:textStyle="bold"
            android:textColor="@color/white"
            />

        <Button
            android:id="@+id/plus"
            android:layout_width="100dp"
            android:layout_height="100dp"
            android:layout_margin="1dp"
            android:background="@drawable/back"
            android:text="+"
            android:textSize="30dp"
            android:textStyle="bold"
            android:textColor="@color/black"
            />
    </GridLayout>
    <GridLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:columnCount="4"
        android:layout_below="@id/row4"
        android:id="@+id/row5">


        <Button
            android:id="@+id/zero"
            android:layout_width="202dp"
            android:layout_height="100dp"
            android:layout_margin="1dp"
            android:background="@drawable/back"
            android:text="0"
            android:textSize="30dp"
            android:textStyle="bold"
            android:textColor="@color/white"
            />
```

```xml
    <Button
        android:id="@+id/point"
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:layout_margin="1dp"
        android:background="@drawable/back"
        android:text="."
        android:textSize="30dp"
        android:textStyle="bold"
        android:textColor="@color/white"
        />

    <Button
        android:id="@+id/equal"
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:layout_margin="1dp"
        android:background="@drawable/back"
        android:text="="
        android:textSize="30dp"
        android:textStyle="bold"
        android:textColor="@color/black"
        />
    </GridLayout>
  </RelativeLayout>


</RelativeLayout>
```

Java:

```java
package com.example.calculator;

import static java.lang.Math.abs;

import androidx.appcompat.app.AppCompatActivity;

import android.graphics.Color;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
import android.widget.Toast;

import org.w3c.dom.Text;

public class MainActivity extends AppCompatActivity {
```

```java
    Button
b1,b2,b3,b4,b5,b6,b7,b8,b9,b0,badd,bminus,bmul,bdiv,bmod,bclr,ballclr,beql,bpoint;
    TextView t1,t2,t3;
    int cal = 0;
    double no1,no2;

    String str1,str2,str3;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        b1 = (Button) findViewById(R.id.num1);
        b2 = (Button) findViewById(R.id.num2);
        b3 = (Button) findViewById(R.id.num3);
        b4 = (Button) findViewById(R.id.num4);
        b5 = (Button) findViewById(R.id.num5);
        b6 = (Button) findViewById(R.id.num6);
        b7 = (Button) findViewById(R.id.num7);
        b8 = (Button) findViewById(R.id.num8);
        b9 = (Button) findViewById(R.id.num9);
        b0 = (Button) findViewById(R.id.zero);

        badd = (Button) findViewById(R.id.plus);
        bminus = (Button) findViewById(R.id.min);
        bmul = (Button) findViewById(R.id.mul);
        bdiv = (Button) findViewById(R.id.div);
        bmod = (Button) findViewById(R.id.mod);


        bclr = (Button) findViewById(R.id.clr);
        ballclr = (Button) findViewById(R.id.allclr);
        beql = (Button) findViewById(R.id.equal);
        bpoint = (Button) findViewById(R.id.point);

        t1 = (TextView) findViewById(R.id.no01);
        t2 = (TextView) findViewById(R.id.no02);
        t3 = (TextView) findViewById(R.id.no03);


        str1 = "";
        str2 ="";
        str3 = "";

        b1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                str2 += "1";
                t2.setText(str2);
```

```java
        }
    });

    b2.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            str2 += "2";
            t2.setText(str2);
        }
    });

    b3.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            str2 += "3";
            t2.setText(str2);
        }
    });

    b4.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            str2 += "4";
            t2.setText(str2);
        }
    });

    b5.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            str2 += "5";
            t2.setText(str2);
        }
    });

    b6.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            str2 += "6";
            t2.setText(str2);
        }
    });

    b7.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            str2 += "7";
            t2.setText(str2);
        }
    });
```

```java
b8.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        str2 += "8";
        t2.setText(str2);
    }
});

b9.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        str2 += "9";
        t2.setText(str2);
    }
});

b0.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        str2 += "0";
        t2.setText(str2);
    }
});

badd.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {

        if(!str2.isEmpty()){
            str3 = "+";
            str1 =  str2;
            str2 = "";
            t1.setText(str1);
            t2.setText(str2);
            t3.setText(str3);
            cal = 1;
        }
        else{
            str3 = "";
            t3.setText(str3);
        }
    }
});

bminus.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        if(!str2.isEmpty()){
            str3 = "-";
```

```java
            str1 =  str2;
            str2 = "";
            t1.setText(str1);
            t2.setText(str2);
            t3.setText(str3);
            cal = 2;
          }
          else{
            str3 = "";
            t3.setText(str3);
          }

      }
    });

    bmul.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View v) {
          if (!str2.isEmpty()) {
            str3 = "x";
            str1 = str2;
            str2 = "";
            t1.setText(str1);
            t2.setText(str2);
            t3.setText(str3);
            cal = 3;
          } else {
            str3 = "";
            t3.setText(str3);
          }
       }
    });
    bdiv.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View v) {
          if(!str2.isEmpty()){
            str3 = "/";
            str1 =  str2;
            str2 = "";
            t1.setText(str1);
            t2.setText(str2);
            t3.setText(str3);
            cal = 4;
          }
          else{
            str3 = "";
            t3.setText(str3);
          }
       }
    });bmod.setOnClickListener(new View.OnClickListener() {
```

```java
        @Override
        public void onClick(View v) {
            if(!str2.isEmpty()){
                str3 = "%";
                str1 =  str2;
                str2 = "";
                t1.setText(str1);
                t2.setText(str2);
                t3.setText(str3);
                cal = 5;
            }
            else{
                str3 = "";
                t3.setText(str3);
            }
        }
    });

    beql.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {

            if (cal == 1) {
                no1 = Double.parseDouble(str1);
                no2 = Double.parseDouble(str2);
                no2 += no1;
                str2 = new String(String.valueOf(no2));
                t2.setText(str2);
                str1 = "";
                str3 = "";
                t1.setText(str1);
                t3.setText(str3);

            }

            else if (cal == 2) {
                no1 = Double.parseDouble(str1);
                no2 = Double.parseDouble(str2);
                no2 -= no1;
                //abs(no2);
                str2 = new String(String.valueOf(no2));
                t2.setText(str2);
                str1 = "";
                str3 = "";
                t1.setText(str1);
                t3.setText(str3);
            }
            else if (cal == 3) {
                no1 = Double.parseDouble(str1);
                no2 = Double.parseDouble(str2);
```

```java
            no2 *= no1;
            str2 = new String(String.valueOf(no2));
            t2.setText(str2);
            str1 = "";
            str3 = "";
            t1.setText(str1);
            t3.setText(str3);
        }

        else if (cal == 4) {
            no1 = Double.parseDouble(str1);
            no2 = Double.parseDouble(str2);
            no2 /= no1;
            str2 = new String(String.valueOf(no2));
            t2.setText(str2);
            str1 = "";
            str3 = "";
            t1.setText(str1);
            t3.setText(str3);
        }
        else if( cal == 5){
            no1 = Double.parseDouble(str1);
            no2 = Double.parseDouble(str2);
            no2 %= no1;
            str2 = new String(String.valueOf(no2));
            t2.setText(str2);
            str1 = "";
            str3 = "";
            t1.setText(str1);
            t3.setText(str3);
    }
        else if (str3.isEmpty() || str2.isEmpty() || str1 .isEmpty()){
            Toast.makeText(MainActivity.this, "Something went wrong",
Toast.LENGTH_SHORT).show();

        }
        else{
            Toast.makeText(MainActivity.this, "Something went wrong",
Toast.LENGTH_SHORT).show();
        }
    }
});

ballclr.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        str2 ="";
        str1 ="";
        str3 ="";
        t1.setText(str1);
```

```java
            t2.setText(str2);
            t3.setText(str3);
        }
    });
    bclr.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {


            str2 ="";
            str1 ="";
            str3 ="";
            t1.setText(str1);
            t2.setText(str2);
            t3.setText(str3);
        }
    });

    bpoint.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            str2 += ".";
            t2.setText(str2);
        }
    });

    }
}
```