XML Code

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
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:textAlignment="center"
    android:textDirection="firstStrong"
    tools:context=".MainActivity">

    <Button
        android:id="@+id/btn_dot"
        android:layout_width="86dp"
        android:layout_height="49dp"
        android:text="."
        android:textSize="24sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.498"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.89" />

    <Button
        android:id="@+id/btn_eight"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="8"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.498"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.543" />

    <Button
        android:id="@+id/btn_seven"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="7"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.157"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.543" />

    <Button
        android:id="@+id/btn_nine"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="9"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.869"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.543" />
```

```xml
<Button
    android:id="@+id/btn_two"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="2"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.498"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.651" />

<Button
    android:id="@+id/btn_one"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="1"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.157"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.661" />

<Button
    android:id="@+id/btn_three"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="3"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.869"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.661" />

<Button
    android:id="@+id/btn_five"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="5"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.498"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.777" />

<Button
    android:id="@+id/btn_multi"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="*"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.904"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.428" />
```

```xml
<Button
    android:id="@+id/btn_minus"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="-"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.544"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.428" />

<Button
    android:id="@+id/btn_four"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="4"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.157"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.777" />

<Button
    android:id="@+id/btn_eql"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="="
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.869"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.32" />

<TextView
    android:id="@+id/textView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="CALCULATOR"
    android:textColor="#E64A19"
    android:textSize="34sp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.497"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.023" />

<TextView
    android:id="@+id/textView2"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Result"
    android:textAlignment="center"
    android:textSize="24sp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.098"
    app:layout_constraintStart_toStartOf="parent"
```

```xml
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.145" />

    <EditText
        android:id="@+id/ET_Result"
        android:layout_width="227dp"
        android:layout_height="111dp"
        android:ems="10"
        android:hint="Enter Number"
        android:inputType="textPersonName"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.831"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.112" />

    <Button
        android:id="@+id/btn_plus"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="+"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.157"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.446" />

    <Button
        android:id="@+id/btn_six"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="6"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.886"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.777" />

    <Button
        android:id="@+id/btn_zero"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="0"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.16"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.89" />

    <Button
        android:id="@+id/btn_divide"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="/"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.145"
```

```xml
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.336" />

        <Button
            android:id="@+id/btn_clear"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="C"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.867"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.888" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

JAVA Code

```java
package com.example.calculator;

import android.annotation.SuppressLint;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import androidx.appcompat.app.AppCompatActivity;

public class
MainActivity extends AppCompatActivity {
    Button
b1,b2,b3,b4,b5,b6,b7,b8,b9,b0,bdot,bcl,bplus,bminus,bmul
ti,bdiv,beql;
    EditText ET_Result;
    Float v1, v2;
    Boolean add,sub,multi,div;


    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        b1 = (Button)findViewById(R.id.btn_one);
        b2 = (Button) findViewById(R.id.btn_two);
        b3= (Button)findViewById(R.id.btn_three);
        b4=(Button)findViewById(R.id.btn_four);
        b5=(Button)findViewById(R.id.btn_five);
        b6=(Button) findViewById(R.id.btn_six);
        b7=(Button)findViewById(R.id.btn_seven);
        b8=(Button)findViewById(R.id.btn_eight);
```

```java
        b9=(Button)findViewById(R.id.btn_nine);
        b0=(Button)findViewById(R.id.btn_zero);
        bdot=(Button)findViewById(R.id.btn_dot);
        bcl=(Button)findViewById(R.id.btn_clear);
        bplus = (Button) findViewById(R.id.btn_plus);
        bminus = (Button) findViewById(R.id.btn_minus);
        bmulti = (Button) findViewById(R.id.btn_multi);
        bdiv = (Button) findViewById(R.id.btn_divide);
        beql = (Button) findViewById(R.id.btn_eql);
        ET_Result = (EditText)
findViewById(R.id.ET_Result);
        b1.setOnClickListener(new View.OnClickListener()
{

            @SuppressLint("SetTextI18n")
            @Override
            public void onClick(View view) {

ET_Result.setText(ET_Result.getText()+"1");
            }
        });
        b2.setOnClickListener(new View.OnClickListener()
{

            @SuppressLint("SetTextI18n")
            @Override
            public void onClick(View view)
            {

ET_Result.setText(ET_Result.getText()+"2");
            }
        });
        b3.setOnClickListener(new View.OnClickListener()
{

            @SuppressLint("SetTextI18n")
            @Override
            public void onClick(View view) {

ET_Result.setText(ET_Result.getText()+"3");
            }
        });
        b4.setOnClickListener(new View.OnClickListener()
{

            @SuppressLint("SetTextI18n")
            @Override
            public void onClick(View view) {

ET_Result.setText(ET_Result.getText()+"4");
            }
```

```java
            });
        b5.setOnClickListener(new View.OnClickListener()
{

            @SuppressLint("SetTextI18n")
            @Override
            public void onClick(View view) {

ET_Result.setText(ET_Result.getText()+"5");
            }
        });
        b6.setOnClickListener(new View.OnClickListener()
{

            @SuppressLint("SetTextI18n")
            @Override
            public void onClick(View view) {

ET_Result.setText(ET_Result.getText()+"6");
            }
        });
        b7.setOnClickListener(new View.OnClickListener()
{

            @SuppressLint("SetTextI18n")
            @Override
            public void onClick(View view) {

ET_Result.setText(ET_Result.getText()+"7");
            }
        });
        b8.setOnClickListener(new View.OnClickListener()
{

            @SuppressLint("SetTextI18n")
            @Override
            public void onClick(View view) {

ET_Result.setText(ET_Result.getText()+"8");
            }
        });
        b9.setOnClickListener(new View.OnClickListener()
{

            @SuppressLint("SetTextI18n")
            @Override
            public void onClick(View view) {

ET_Result.setText(ET_Result.getText()+"9");
            }
        });
        b0.setOnClickListener(new View.OnClickListener()
```

```java
{
            @SuppressLint("SetTextI18n")
            @Override
            public void onClick(View view) {

ET_Result.setText(ET_Result.getText()+"0");
            }
        });
        bdot.setOnClickListener(new
View.OnClickListener() {
            @SuppressLint("SetTextI18n")
            @Override
            public void onClick(View view) {

ET_Result.setText(ET_Result.getText()+".");
            }
        });
        bcl.setOnClickListener(new
View.OnClickListener() {
            @SuppressLint("SetTextI18n")
            @Override
            public void onClick(View view) {
                ET_Result.setText(ET_Result.getText()+"
");
            }
        });
        bplus.setOnClickListener(new
View.OnClickListener() {
            @Override
            public void onClick(View view) {

                v1 =
Float.parseFloat(ET_Result.getText()+"");
                add = true;
                ET_Result.setText(null);


            }
        });
        bminus.setOnClickListener(new
View.OnClickListener() {
            @Override
            public void onClick(View view) {

                v1 =
Float.parseFloat(ET_Result.getText()+"");
                sub = true;
                ET_Result.setText(null);
```

```java
                }
        });
        bmulti.setOnClickListener(new
View.OnClickListener() {
                @Override
                public void onClick(View view) {

                    v1 =
Float.parseFloat(ET_Result.getText()+"");
                    multi = true;
                    ET_Result.setText(null);

                }
        });
        bdiv.setOnClickListener(new
View.OnClickListener() {
                @Override
                public void onClick(View view) {

                    v1 =
Float.parseFloat(ET_Result.getText()+"");
                    div = true;
                    ET_Result.setText(null);

                }
        });
        beql.setOnClickListener(new
View.OnClickListener() {
                @Override
                public void onClick(View view) {
                    v2 =
Float.parseFloat(String.valueOf(ET_Result.getText()));
                    if (add) {
                        ET_Result.setText(v1+v2+"");
                        add = false;
                    }
                     if (sub) {
                        ET_Result.setText(v1-v2+"");
                        sub = false;
                    }
                    if (multi) {
                        ET_Result.setText(v1*v2+"");
                        multi = false;
                    }
                    if (div) {
                        ET_Result.setText(v1/v2+"");
```

```
                        div = false;
                }
            }
        });
    }
}
```