

XML Code

```
<?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" />
```

```
<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" />
```

```
<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"
```

```

        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"

```

```

        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

```

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);
    }
}

```

```

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

ET_Result.setText(ET_Result.getText()+"1");
            }
        });
        b2.setOnClickListener(new View.OnClickListener()
        {
            @SuppressWarnings("SetTextI18n")
            @Override
            public void onClick(View view)
            {

ET_Result.setText(ET_Result.getText()+"2");
            }
        });
        b3.setOnClickListener(new View.OnClickListener()
        {
            @SuppressWarnings("SetTextI18n")
            @Override
            public void onClick(View view) {

ET_Result.setText(ET_Result.getText()+"3");
            }
        });
        b4.setOnClickListener(new View.OnClickListener()
        {
            @SuppressWarnings("SetTextI18n")
            @Override
            public void onClick(View view) {

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

```

```

    });
    b5.setOnClickListener(new View.OnClickListener()
    {
        @SuppressWarnings("SetTextI18n")
        @Override
        public void onClick(View view) {

ET_Result.setText(ET_Result.getText()+"5");
        }
    });
    b6.setOnClickListener(new View.OnClickListener()
    {
        @SuppressWarnings("SetTextI18n")
        @Override
        public void onClick(View view) {

ET_Result.setText(ET_Result.getText()+"6");
        }
    });
    b7.setOnClickListener(new View.OnClickListener()
    {
        @SuppressWarnings("SetTextI18n")
        @Override
        public void onClick(View view) {

ET_Result.setText(ET_Result.getText()+"7");
        }
    });
    b8.setOnClickListener(new View.OnClickListener()
    {
        @SuppressWarnings("SetTextI18n")
        @Override
        public void onClick(View view) {

ET_Result.setText(ET_Result.getText()+"8");
        }
    });
    b9.setOnClickListener(new View.OnClickListener()
    {
        @SuppressWarnings("SetTextI18n")
        @Override
        public void onClick(View view) {

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

```

```

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

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

ET_Result.setText(ET_Result.getText()+".");
    }
    });
    bcl.setOnClickListener(new
View.OnClickListener() {
        @SuppressWarnings("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);

```



```

        }
    });
    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;
    }
    });
}
```