**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,bmulti,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() {  
 @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");  
 }  
 });  
 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() {  
 @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);  
  
 }  
 });  
 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;  
 }  
 }  
 });  
 }  
}