**Activity\_main.xml:**

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@drawable/background"  
 tools:context=".MainActivity"  
 android:orientation="vertical">  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@drawable/background"  
 android:clickable="true"  
 android:layout\_margin="30dp"  
 android:orientation="vertical">  
  
 <TextView  
 android:id="@+id/result"  
 android:layout\_width="341dp"  
 android:layout\_height="219dp"  
 android:textColor="@android:color/white"  
 android:textStyle="bold"  
 android:textAlignment="center"  
 android:hint="Result"  
 android:textSize="30dp" />  
  
 <LinearLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_margin="10dp">  
  
 <Button  
 android:id="@+id/btn7"  
 android:layout\_width="59dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:background="@android:color/darker\_gray"  
 android:text="7"  
 android:textSize="20dp" />  
  
 <Button  
 android:id="@+id/btn8"  
 android:layout\_width="59dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:background="@android:color/darker\_gray"  
 android:text="8"  
 android:textSize="20dp" />  
  
 <Button  
 android:id="@+id/btn9"  
 android:layout\_width="59dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:background="@android:color/darker\_gray"  
 android:text="9"  
 android:textSize="20dp" />  
  
 <Button  
 android:id="@+id/btnDivide"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:background="@drawable/btn\_circle"  
 android:text="/"  
 android:textColor="@android:color/white"  
 android:textColorHighlight="?attr/colorBackgroundFloating"  
 android:textSize="30sp"  
 android:textStyle="bold"  
  
 />  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_margin="10dp">  
  
 <Button  
 android:id="@+id/btn6"  
 android:layout\_width="59dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:background="@android:color/darker\_gray"  
 android:text="6"  
 android:textSize="20dp" />  
  
 <Button  
 android:id="@+id/btn5"  
 android:layout\_width="59dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:background="@android:color/darker\_gray"  
 android:text="5"  
 android:textSize="20dp" />  
  
 <Button  
 android:id="@+id/btn4"  
 android:layout\_width="59dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:background="@android:color/darker\_gray"  
 android:text="4"  
 android:textSize="20dp" />  
  
 <Button  
 android:id="@+id/btnmultiply"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:background="@drawable/btn\_circle"  
 android:text="\*"  
 android:textColor="@android:color/white"  
 android:textColorHighlight="?attr/colorBackgroundFloating"  
 android:textSize="30sp"  
 android:textStyle="bold">  
  
 </Button>  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_margin="10dp">  
  
 <Button  
 android:id="@+id/btn3"  
 android:layout\_width="59dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:background="@android:color/darker\_gray"  
 android:text="3"  
 android:textSize="20dp" />  
  
 <Button  
 android:id="@+id/btn2"  
 android:layout\_width="59dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:background="@android:color/darker\_gray"  
 android:text="2"  
 android:textSize="20dp" />  
  
 <Button  
 android:id="@+id/btn1"  
 android:layout\_width="59dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:background="@android:color/darker\_gray"  
 android:text="1"  
 android:textSize="20dp" />  
  
 <Button  
 android:id="@+id/btnsubtract"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:background="@drawable/btn\_circle"  
 android:text="-"  
 android:textColor="@android:color/white"  
 android:textColorHighlight="?attr/colorBackgroundFloating"  
 android:textSize="30sp"  
 android:textStyle="bold" />  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_margin="10dp">  
  
 <Button  
 android:id="@+id/btnClear"  
 android:layout\_width="59dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:background="@android:color/darker\_gray"  
 android:text="C"  
 android:textSize="20dp" />  
  
 <Button  
 android:id="@+id/btn0"  
 android:layout\_width="59dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:background="@android:color/darker\_gray"  
 android:text="0"  
 android:textSize="20dp" />  
  
 <Button  
 android:id="@+id/btnequals"  
 android:layout\_width="59dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:background="@drawable/equal"  
 android:text="="  
 android:textColor="@android:color/black"  
 android:textSize="30sp" />  
  
 <Button  
 android:id="@+id/btnsum"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:background="@drawable/btn\_circle"  
 android:text="+"  
 android:textColor="@android:color/white"  
 android:textSize="30sp"  
 android:textStyle="bold" />  
 </LinearLayout>  
 </LinearLayout>  
</LinearLayout>

**MainActivity.java:**package com.example.myapplication;  
import android.support.v7.app.AppCompatActivity;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.TextView;  
public class MainActivity extends AppCompatActivity {  
 Button b0,b1,b2,b3,b4,b5,b6,b7,b8,b9,badd,bdiv,bsub,bmul,bequal,bclear;  
 TextView ans;  
 double var1,var2;  
 boolean add,sub,mul,div;  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 bclear=(Button)findViewById(R.id.*btnClear*) ;  
 b0=(Button)findViewById(R.id.*btn0*);  
 b1=(Button)findViewById(R.id.*btn1*);  
 b2=(Button)findViewById(R.id.*btn2*);  
 b3=(Button)findViewById(R.id.*btn3*);  
 b4=(Button)findViewById(R.id.*btn4*);  
 b5=(Button)findViewById(R.id.*btn5*);  
 b6=(Button)findViewById(R.id.*btn6*);  
 b7=(Button)findViewById(R.id.*btn7*);  
 b8=(Button)findViewById(R.id.*btn8*);  
 b9=(Button)findViewById(R.id.*btn9*);  
 badd=(Button)findViewById(R.id.*btnsum*);  
 bsub=(Button)findViewById(R.id.*btnsubtract*);  
 bmul=(Button)findViewById(R.id.*btnmultiply*);  
 bdiv=(Button)findViewById(R.id.*btnDivide*);  
 ans=(TextView)findViewById(R.id.*result*);  
 bequal=(Button)findViewById(R.id.*btnequals*);  
 b0.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View view) {  
 ans.setText(ans.getText()+"0");  
 }  
 });  
  
 b1.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View view) {  
 ans.setText(ans.getText()+"1");  
 }  
 });  
 bclear.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View view) {  
 ans.setText(null);  
 }  
 });  
 b1.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View view) {  
 ans.setText(ans.getText()+"1");  
 }  
 });  
 b2.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View view) {  
 ans.setText(ans.getText()+"2");  
 }  
 });  
 b3.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View view) {  
 ans.setText(ans.getText()+"3");  
 }  
 });  
 b4.setOnClickListener(new View.OnClickListener() {  
   
 public void onClick(View view) {  
 ans.setText(ans.getText()+"4");  
 }  
 });  
 b5.setOnClickListener(new View.OnClickListener() {  
   
 public void onClick(View view) {  
 ans.setText(ans.getText()+"5");  
 }  
 });  
 b6.setOnClickListener(new View.OnClickListener() {  
   
 public void onClick(View view) {  
 ans.setText(ans.getText()+"6");  
 }  
 });  
 b7.setOnClickListener(new View.OnClickListener() {  
   
 public void onClick(View view) {  
 ans.setText(ans.getText()+"7");  
 }  
 });  
 b8.setOnClickListener(new View.OnClickListener() {  
   
 public void onClick(View view) {  
 ans.setText(ans.getText()+"8");  
 }  
 });  
 b9.setOnClickListener(new View.OnClickListener() {  
   
 public void onClick(View view) {  
 ans.setText(ans.getText()+"9");  
 }  
 });  
 bequal.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View view) {  
 ans.setText(ans.getText()+"=");  
 }  
 });  
 badd.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View view) {  
 var1=Double.*parseDouble*(ans.getText()+"");  
 add=true;  
 ans.setText(null);  
 }  
 });  
 bsub.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View view) {  
 var1=Double.*parseDouble*(ans.getText()+"");  
 sub=true;  
 ans.setText(null);  
 }  
 });  
  
 bdiv.setOnClickListener(new View.OnClickListener() {  
   
 public void onClick(View view) {  
 var1=Double.*parseDouble*(ans.getText()+"");  
 div=true;  
 ans.setText(null);  
 }  
 });  
 bequal.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View view) {  
 var2=Double.*parseDouble*(ans.getText()+"");  
 if(add==true)  
 {  
 ans.setText(var1+var2+"");  
 add=false;  
 }  
 if(mul==true){  
 ans.setText(var1+var2+"");  
 mul=false;  
 }  
 if(div==true){  
 ans.setText(var1+var2+"");  
 div=false;  
 }  
 if(sub==true){  
 ans.setText(var1+var2+"");  
 sub=false;}});}}

**Output:**

