## activity main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<GridLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    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:columnCount="4"
    android:background="#ecf3f3"
    tools:context=".MainActivity">
    <TextView
        android:layout margin="5dp"
        android:id="@+id/display"
        android:layout width="match parent"
        android:layout height="wrap content"
        android:layout columnSpan="4"
        android:background="#ecf1f1"
        android:layout rowWeight=".2"
        android:textSize="30sp" />
    <Button
        android:id="@+id/button7"
        android:layout rowWeight=".1"
        android:layout marginLeft="4dp"
        android:layout marginRight="2dp"
        android:layout width="94dp"
        android:layout height="wrap content"
        android:textSize="20sp"
        android:text="7" />
    <Button
        android:id="@+id/button8"
        android:layout rowWeight=".1"
        android:layout marginRight="2dp"
        android:layout width="94dp"
        android:layout height="wrap content"
        android:textSize="20sp"
        android:text="8" />
    <Button
        android:id="@+id/button9"
        android:layout rowWeight=".1"
        android:layout marginRight="2dp"
        android:layout width="94dp"
        android:layout height="wrap content"
        android:textSize="20sp"
        android:text="9" />
    <Button
        android:id="@+id/buttondiv"
        android:layout rowWeight=".1"
        android:layout_width="94dp"
        android:layout height="wrap content"
        android:textSize="20sp"
```

```
android:text="/" />
<Button
   android:id="@+id/button4"
   android:layout rowWeight=".1"
   android:layout marginLeft="4dp"
   android:layout marginRight="1dp"
   android:layout width="94dp"
   android:layout height="wrap content"
   android:textSize="20sp"
   android:text="4" />
<Button
   android:id="@+id/button5"
   android:layout rowWeight=".1"
   android:layout marginRight="1dp"
   android:layout width="94dp"
   android:layout height="wrap content"
   android:textSize="20sp"
   android:text="5" />
<Button
   android:id="@+id/button6"
   android:layout rowWeight=".1"
   android:layout marginRight="1dp"
   android:layout width="94dp"
   android:layout height="wrap content"
   android:textSize="20sp"
   android:text="6" />
<Button
   android:id="@+id/buttonmul"
   android:layout rowWeight=".1"
   android:layout width="94dp"
   android:layout height="wrap content"
   android:textSize="20sp"
   android:text="*" />
<Button
   android:id="@+id/button1"
   android:layout marginLeft="4dp"
   android:layout rowWeight=".1"
   android:layout marginRight="1dp"
   android:layout width="94dp"
   android:layout_height="wrap content"
   android:textSize="20sp"
   android:text="1" />
<Button
   android:id="@+id/button2"
   android:layout rowWeight=".1"
   android:layout marginRight="1dp"
   android:layout width="94dp"
   android:layout height="wrap content"
   android:textSize="20sp"
   android:text="2" />
```

```
<Button
   android:id="@+id/button3"
   android:layout rowWeight=".1"
   android:layout marginRight="1dp"
   android:layout width="94dp"
   android:layout height="wrap content"
   android:textSize="20sp"
   android:text="3" />
<Button
   android:id="@+id/buttonsub"
   android:layout rowWeight=".1"
   android:layout width="94dp"
   android:layout height="wrap content"
   android:textSize="20sp"
   android:text="-" />
<Button
   android:id="@+id/buttonDot"
   android:layout marginLeft="4dp"
   android:layout rowWeight=".1"
   android:layout marginRight="1dp"
   android:layout width="94dp"
   android:layout height="wrap content"
   android:textSize="20sp"
   android:text="." />
<But.ton
   android:id="@+id/button0"
    android:layout rowWeight=".1"
   android:layout_marginRight="1dp"
   android:layout_width="94dp"
   android:layout height="wrap content"
   android:textSize="20sp"
   android:text="0" />
<Button
   android:id="@+id/buttonClear"
   android:layout rowWeight=".1"
   android:layout marginRight="1dp"
   android:layout width="94dp"
   android:layout height="wrap content"
   android:textSize="20sp"
   android:text="C" />
<Button
   android:id="@+id/buttonadd"
   android:layout rowWeight=".1"
   android:layout width="94dp"
   android:layout height="wrap content"
   android:textSize="20sp"
   android:text="+" />
<Button
   android:id="@+id/buttonegl"
   android:layout width="match parent"
    android:layout height="wrap content"
```

```
android:layout rowWeight=".1"
        android:textSize="20sp"
        android:layout columnSpan="4"
        android:layout margin="5dp"
        android:text="=" />
</GridLavout>
MainActivity.java
package com.example.mycalculator;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
public class MainActivity extends AppCompatActivity {
    Double input1 = 0.0, input2 = 0.0;
    TextView edt1;
   boolean Addition, Subtract, Multiplication, Division, decimal;
    Button button0, button1, button2, button3, button4, button5, button6,
button7, button8, button9, buttonAdd, buttonSub, buttonMul, buttonDivision,
buttonEqual, buttonClear, buttonDot;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
        button0 = findViewById(R.id.button0);
        button1 = findViewById(R.id.button1);
        button2 = findViewById(R.id.button2);
        button3 = findViewById(R.id.button3);
        button4 = findViewById(R.id.button4);
        button5 = findViewById(R.id.button5);
        button6 = findViewById(R.id.button6);
        button7 = findViewById(R.id.button7);
        button8 = findViewById(R.id.button8);
        button9 = findViewById(R.id.button9);
        buttonDot = findViewById(R.id.buttonDot);
        buttonAdd = findViewById(R.id.buttonadd);
        buttonSub = findViewById(R.id.buttonsub);
        buttonMul = findViewById(R.id.buttonmul);
        buttonDivision = findViewById(R.id.buttondiv);
        buttonClear = findViewById(R.id.buttonClear);
        buttonEqual = findViewById(R.id.buttoneql);
        edt1 = findViewById(R.id.display);
        button1.setOnClickListener(new View.OnClickListener() {
                @Override
                public void onClick(View v) {
                    edt1.setText(edt1.getText() + "1");
        });
        button2.setOnClickListener(new View.OnClickListener() {
            @Override
```

```
public void onClick(View v) {
        edt1.setText(edt1.getText() + "2");
});
button3.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        edt1.setText(edt1.getText() + "3");
});
button4.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        edt1.setText(edt1.getText() + "4");
});
button5.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        edt1.setText(edt1.getText() + "5");
});
button6.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        edt1.setText(edt1.getText() + "6");
});
button7.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        edt1.setText(edt1.getText() + "7");}
});
button8.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        edt1.setText(edt1.getText() + "8");
});
button9.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        edt1.setText(edt1.getText() + "9");
});
button0.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        edt1.setText(edt1.getText() + "0");
});
buttonAdd.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        if (edt1.getText().length() != 0) {
            input1 = Double.parseDouble(edt1.getText() + "");
            Addition = true;
```

```
decimal = false;
            edt1.setText(null);
        }
    }
});
buttonSub.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        if (edt1.getText().length() != 0) {
            input1 = Double.parseDouble(edt1.getText() + "");
            Subtract = true;
            decimal = false;
            edt1.setText(null);
        }
    }
});
buttonMul.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        if (edt1.getText().length() != 0) {
            input1 = Double.parseDouble(edt1.getText() + "");
            Multiplication = true;
            decimal = false;
            edt1.setText(null);
    }
});
buttonDivision.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        if (edt1.getText().length() != 0) {
            input1 = Double.parseDouble(edt1.getText() + "");
            Division = true;
            decimal = false;
            edt1.setText(null);
});
buttonEqual.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        if (Addition || Subtract || Multiplication || Division) {
            input2 = Double.parseDouble(edt1.getText() + "");
        if (Addition) {
            edt1.setText(input1 + input2 + "");
            Addition = false;
        if (Subtract) {
            edt1.setText(input1 - input2 + "");
            Subtract = false;
        if (Multiplication) {
            edt1.setText(input1 * input2 + "");
            Multiplication = false;
        if (Division) {
```

```
edt1.setText(input1 / input2 + "");
                    Division = false;
                }
            }
        });
        buttonClear.setOnClickListener(new View.OnClickListener() {
            @Override
               public void onClick(View v) {
               edt1.setText("");
            input1 = 0.0;
            input2 = 0.0;
        });
        buttonDot.setOnClickListener(new View.OnClickListener() {
            @Override
                public void onClick(View v) {
                if (decimal) {
                    //do nothing or you can show the error
                    } else {
                    edt1.setText(edt1.getText() + ".");
                    decimal = true;
                }
           }
       });
   }
}
```