activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<GridLayout 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: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"
```

```xml
        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" />
```

```xml
<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="." />

<Button
    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/buttoneql"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
```

```xml
        android:layout_rowWeight=".1"
        android:textSize="20sp"
        android:layout_columnSpan="4"
        android:layout_margin="5dp"
        android:text="=" />

</GridLayout>
```

MainActivity.java
```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
```

```java
        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;
```

```java
                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) {
```

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