Calculator

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Java file:

```java
package com.example.mycal;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.TextView;

import com.google.android.material.button.MaterialButton;
import org.mozilla.javascript.Context;
import org.mozilla.javascript.Scriptable;

public class MainActivity extends AppCompatActivity implements View.OnClickListener {
    TextView resultTv,solutionTv;
    MaterialButton buttonAc,buttonC,buttonDot;
    MaterialButton
button00,button0,button1,button2,button3,button4,button5,button6,button7,button8,button9;
    MaterialButton buttonPercent,buttonMultiply,buttonDivide,buttonAdd,buttonSub,buttonEquals;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        resultTv= findViewById(R.id.resultTv);
        solutionTv= findViewById(R.id.solutionTv);

        assignId(buttonAc,R.id.button_ac);
        assignId(buttonC,R.id.button_c);
        assignId(buttonDot,R.id.button_dot);
        assignId(button00,R.id.button_00);
        assignId(button0,R.id.button_0);
        assignId(button1,R.id.button_1);
        assignId(button2,R.id.button_2);
        assignId(button3,R.id.button_3);
        assignId(button4,R.id.button_4);
```

```java
        assignId(button5,R.id.button_5);
        assignId(button6,R.id.button_6);
        assignId(button7,R.id.button_7);
        assignId(button8,R.id.button_8);
        assignId(button9,R.id.button_9);
        assignId(buttonPercent,R.id.button_percent);
        assignId(buttonMultiply,R.id.button_multiply);
        assignId(buttonDivide,R.id.button_divide);
        assignId(buttonAdd,R.id.button_add);
        assignId(buttonSub,R.id.button_sub);
        assignId(buttonEquals,R.id.button_equals);



}

void assignId(MaterialButton btn,int id){
    btn= findViewById(id);
    btn.setOnClickListener(this);
}

@Override
public void onClick(View v) {
    MaterialButton button= (MaterialButton) v;
    String buttonText =button.getText().toString();
    String dataToCalculate = solutionTv.getText().toString();


    if(buttonText.equals("AC")){
        solutionTv.setText(" ");
        resultTv.setText(" ");
        return;
    }




    if(buttonText.equals("=")){
        solutionTv.setText(resultTv.getText());
        return;
    }

    if(buttonText.equals("C")){
        dataToCalculate=dataToCalculate.substring(0,dataToCalculate.length()-1);
    }else{
```

```java
            dataToCalculate=dataToCalculate+buttonText;
        }
        solutionTv.setText(dataToCalculate);

        String finalResult= getResult(dataToCalculate);

        if(!finalResult.equals("Err")){
            resultTv.setText(finalResult);
        }

    }

    String getResult(String data){
        try{
            Context context  = Context.enter();
            context.setOptimizationLevel(-1);
            Scriptable scriptable = context.initStandardObjects();
            String finalResult =  context.evaluateString(scriptable,data,"Javascript",1,null).toString();
            if(finalResult.endsWith(".0")){
                finalResult = finalResult.replace(".0","");
            }
            return finalResult;
        }catch (Exception e){
            return "Err";
        }
    }
}
```

Manifest file:

```xml
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">

    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
```

```xml
            android:theme="@style/Theme.MyCal"
            tools:targetApi="31">
            <activity
                android:name=".MainActivity"
                android:exported="true">
                <intent-filter>
                    <action android:name="android.intent.action.MAIN" />

                    <category android:name="android.intent.category.LAUNCHER" />
                </intent-filter>
            </activity>
        </application>

    </manifest>
```

Layout XML:

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout 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:background="#FFFFFF"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/solutionTv"
        android:layout_width="383dp"
        android:layout_height="82dp"
        android:layout_above="@id/resultTv"
        android:layout_marginStart="16dp"
        android:layout_marginTop="16dp"
        android:layout_marginEnd="16dp"
        android:layout_marginBottom="16dp"
        android:text=" "
        android:textAlignment="textEnd"
        android:textColor="@color/black"
        android:textSize="48dp" />

    <TextView
        android:id="@+id/resultTv"
```

```xml
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_above="@id/buttons_layout"
        android:layout_marginStart="16dp"
        android:layout_marginTop="16dp"
        android:layout_marginEnd="16dp"
        android:layout_marginBottom="16dp"
        android:text=" "
        android:textAlignment="textEnd"
        android:textColor="@color/black"
        android:textSize="48dp" />


    <LinearLayout
        android:id="@+id/buttons_layout"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_alignParentBottom="true"
        android:orientation="vertical"
        android:layout_marginBottom="16dp"
>

        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:orientation="horizontal">

            <com.google.android.material.button.MaterialButton
                android:id="@+id/button_ac"
                style="@style/Widget.MaterialComponents.ExtendedFloatingActionButton"
                android:layout_width="62dp"
                android:layout_height="62dp"
                android:layout_margin="12dp"
                android:text="AC"
                android:textColor="@color/black"
                android:textSize="14dp"
                app:backgroundTint="#DADADA"
                app:cornerRadius="36dp" />

            <com.google.android.material.button.MaterialButton
                android:id="@+id/button_percent"
                style="@style/Widget.MaterialComponents.ExtendedFloatingActionButton"
                android:layout_width="62dp"
                android:layout_height="62dp"
```

```xml
        android:layout_margin="12dp"
        android:text="%"
        android:textColor="@color/black"
        android:textSize="27dp"
        app:backgroundTint="#DADADA"
        app:cornerRadius="36dp" />

    <com.google.android.material.button.MaterialButton
        android:id="@+id/button_c"
        style="@style/Widget.MaterialComponents.ExtendedFloatingActionButton"
        android:layout_width="62dp"
        android:layout_height="62dp"
        android:layout_margin="12dp"
        android:text="C"
        android:textColor="@color/black"
        android:textSize="27dp"
        app:backgroundTint="#DADADA"
        app:cornerRadius="36dp" />

    <com.google.android.material.button.MaterialButton
        android:id="@+id/button_divide"
        style="@style/Widget.MaterialComponents.ExtendedFloatingActionButton"
        android:layout_width="62dp"
        android:layout_height="62dp"
        android:layout_margin="12dp"
        android:text="/"
        android:textColor="@color/black"
        android:textSize="27dp"
        app:backgroundTint="#DADADA"
        app:cornerRadius="36dp" />


</LinearLayout>

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">

    <com.google.android.material.button.MaterialButton
        android:id="@+id/button_7"
        style="@style/Widget.MaterialComponents.ExtendedFloatingActionButton"
        android:layout_width="62dp"
        android:layout_height="62dp"
```

```xml
    android:layout_margin="12dp"
    android:text="7"
    android:textColor="@color/black"
    android:textSize="27dp"
    app:backgroundTint="#FFFFFF"
    app:cornerRadius="36dp" />

<com.google.android.material.button.MaterialButton
    android:id="@+id/button_8"
    style="@style/Widget.MaterialComponents.ExtendedFloatingActionButton"
    android:layout_width="62dp"
    android:layout_height="62dp"
    android:layout_margin="12dp"
    android:text="8"
    android:textColor="@color/black"
    android:textSize="27dp"
    app:backgroundTint="#FFFFFF"
    app:cornerRadius="36dp" />

<com.google.android.material.button.MaterialButton
    android:id="@+id/button_9"
    style="@style/Widget.MaterialComponents.ExtendedFloatingActionButton"
    android:layout_width="62dp"
    android:layout_height="62dp"
    android:layout_margin="12dp"
    android:text="9"
    android:textColor="@color/black"
    android:textSize="27dp"
    app:backgroundTint="#FFFFFF"
    app:cornerRadius="36dp" />

<com.google.android.material.button.MaterialButton
    android:id="@+id/button_multiply"
    style="@style/Widget.MaterialComponents.ExtendedFloatingActionButton"
    android:layout_width="62dp"
    android:layout_height="62dp"
    android:layout_margin="12dp"
    android:text="*"
    android:textColor="@color/black"
    android:textSize="27dp"
    app:backgroundTint="#DADADA"
    app:cornerRadius="36dp" />
```

```xml
    </LinearLayout>

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal">

        <com.google.android.material.button.MaterialButton
            android:id="@+id/button_4"
            style="@style/Widget.MaterialComponents.ExtendedFloatingActionButton"
            android:layout_width="62dp"
            android:layout_height="62dp"
            android:layout_margin="12dp"
            android:text="4"
            android:textColor="@color/black"
            android:textSize="27dp"
            app:backgroundTint="#FFFFFF"
            app:cornerRadius="36dp" />

        <com.google.android.material.button.MaterialButton
            android:id="@+id/button_5"
            style="@style/Widget.MaterialComponents.ExtendedFloatingActionButton"
            android:layout_width="62dp"
            android:layout_height="62dp"
            android:layout_margin="12dp"
            android:text="5"
            android:textColor="@color/black"
            android:textSize="27dp"
            app:backgroundTint="#FFFFFF"
            app:cornerRadius="36dp" />

        <com.google.android.material.button.MaterialButton
            android:id="@+id/button_6"
            style="@style/Widget.MaterialComponents.ExtendedFloatingActionButton"
            android:layout_width="62dp"
            android:layout_height="62dp"
            android:layout_margin="12dp"
            android:text="6"
            android:textColor="@color/black"
            android:textSize="27dp"
            app:backgroundTint="#FFFFFF"
            app:cornerRadius="36dp" />

        <com.google.android.material.button.MaterialButton
```

```xml
        android:id="@+id/button_add"
        style="@style/Widget.MaterialComponents.ExtendedFloatingActionButton"
        android:layout_width="62dp"
        android:layout_height="62dp"
        android:layout_margin="12dp"
        android:text="+"
        android:textColor="@color/black"
        android:textSize="27dp"
        app:backgroundTint="#DADADA"
        app:cornerRadius="36dp" />


</LinearLayout>

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">

    <com.google.android.material.button.MaterialButton
        android:id="@+id/button_1"
        style="@style/Widget.MaterialComponents.ExtendedFloatingActionButton"
        android:layout_width="62dp"
        android:layout_height="62dp"
        android:layout_margin="12dp"
        android:text="1"
        android:textColor="@color/black"
        android:textSize="27dp"
        app:backgroundTint="#FFFFFF"
        app:cornerRadius="36dp" />

    <com.google.android.material.button.MaterialButton
        android:id="@+id/button_2"
        style="@style/Widget.MaterialComponents.ExtendedFloatingActionButton"
        android:layout_width="62dp"
        android:layout_height="62dp"
        android:layout_margin="12dp"
        android:text="2"
        android:textColor="@color/black"
        android:textSize="27dp"
        app:backgroundTint="#FFFFFF"
        app:cornerRadius="36dp" />

    <com.google.android.material.button.MaterialButton
```

```xml
        android:id="@+id/button_3"
        style="@style/Widget.MaterialComponents.ExtendedFloatingActionButton"
        android:layout_width="62dp"
        android:layout_height="62dp"
        android:layout_margin="12dp"
        android:text="3"
        android:textColor="@color/black"
        android:textSize="27dp"
        app:backgroundTint="#FFFFFF"
        app:cornerRadius="36dp" />

    <com.google.android.material.button.MaterialButton
        android:id="@+id/button_sub"
        style="@style/Widget.MaterialComponents.ExtendedFloatingActionButton"
        android:layout_width="62dp"
        android:layout_height="62dp"
        android:layout_margin="12dp"
        android:text="-"
        android:textColor="@color/black"
        android:textSize="27dp"
        app:backgroundTint="#DADADA"
        app:cornerRadius="36dp" />


</LinearLayout>

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">

    <com.google.android.material.button.MaterialButton
        android:id="@+id/button_00"
        style="@style/Widget.MaterialComponents.ExtendedFloatingActionButton"
        android:layout_width="62dp"
        android:layout_height="62dp"
        android:layout_margin="12dp"
        android:text="00"
        android:textColor="@color/black"
        android:textSize="14dp"
        app:backgroundTint="#FFFFFF"
        app:cornerRadius="36dp" />

    <com.google.android.material.button.MaterialButton
```

```xml
        android:id="@+id/button_0"
        style="@style/Widget.MaterialComponents.ExtendedFloatingActionButton"
        android:layout_width="62dp"
        android:layout_height="62dp"
        android:layout_margin="12dp"
        android:text="0"
        android:textColor="@color/black"
        android:textSize="27dp"
        app:backgroundTint="#FFFFFF"
        app:cornerRadius="36dp" />

    <com.google.android.material.button.MaterialButton

        android:id="@+id/button_dot"
        style="@style/Widget.MaterialComponents.ExtendedFloatingActionButton"
        android:layout_width="62dp"
        android:layout_height="62dp"
        android:layout_margin="12dp"
        android:text="."
        android:textColor="@color/black"
        android:textSize="27dp"
        app:backgroundTint="#FFFFFF"
        app:cornerRadius="36dp" />

    <com.google.android.material.button.MaterialButton
        android:id="@+id/button_equals"
        style="@style/Widget.MaterialComponents.ExtendedFloatingActionButton"
        android:layout_width="62dp"
        android:layout_height="62dp"
        android:layout_margin="12dp"
        android:text="="
        android:textColor="@color/black"
        android:textSize="27dp"
        app:backgroundTint="#D35129"
        app:cornerRadius="36dp" />


    </LinearLayout>

  </LinearLayout>

</RelativeLayout>
```

Screenshot:

89+66

155

AC	%	C	/
7	8	9	*
4	5	6	+
1	2	3	-
00	0	.	=