

```
package com.example.thapar_calci;
```

```
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

buttonC,buttonBrackOpen,buttonBrackClose;

MaterialButton

buttonDivide,buttonMultiply,buttonPlus,buttonMinus,buttonEquals;

MaterialButton

button7,button8,button9,button1,button2,button3,button4,button5,button6,button0;

MaterialButton buttonDot,buttonAC;

@Override

```
protected void onCreate(Bundle  
savedInstanceState) {  
    super.onCreate(savedInstanceState);
```

```
    setContentView(R.layout.activity_main);
```

```
    resultTv =
```

```
    findViewById(R.id.result_tv);
```

```
    solutionTv =
```

```
    findViewById(R.id.solution_tv);
```

```
assignId(buttonC,R.id.button_C);  
    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);  
    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(buttonBrackClose,R.id.button_clo  
sed_bracket);
```

```
assignId(buttonBrackOpen,R.id.button_op  
en_bracket);
```

```
    assignId(buttonAC,R.id.button_ac);  
    assignId(buttonDot,R.id.button_dot);
```

```
assignId(buttonDivide,R.id.button_divide);
```

```
assignId(buttonMinus,R.id.button_minus);

assignId(buttonMultiply,R.id.button_multiply);
    assignId(buttonPlus,R.id.button_plus);

assignId(buttonEquals,R.id.button_equals)
;

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

```
@Override
public void onClick(View view) {
    MaterialButton
button=(MaterialButton) view;
```

String

```
buttonText=button.getText().toString();
```

String

```
dataToCalculate=solutionTv.getText().toString();
```

```
    if(buttonText.equals("AC"))
```

```
    {
```

```
        solutionTv.setText("");
```

```
        resultTv.setText("0");
```

```
        return;
```

```
    }
```

```
    if (buttonText.equals("=")) {
```

```
        solutionTv.setText(resultTv.getText());
```

```
        return;
```

```
    }
```

```
    if(buttonText.equals("C")) {
```

```
        dataToCalculate =
```

```
dataToCalculate.substring(0,
```

```
dataToCalculate.length() - 1);
```

```
    }else
```

```
{
```

```
dataToCalculate=dataToCalculate+buttonT  
ext;
```

```
}
```

```
    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,"Jav
```

```
ascript",1,null).toString();
    if(finalResult.endsWith(".0")){
        finalResult =
finalResult.replace(".0","");
    }
    return finalResult;
}catch (Exception e){
    return "Err";
}
}
}
```