CHANDINI T R

1NT20IS403

BACKGROUND CODE OF CALCULATOR APP

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"</p>
  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"
  tools:context=".MainActivity"
  android:layout margin="20dp"
  android:orientation="vertical"
  android:background="@color/black"
  <TextView
    android:id="@+id/textView"
    android:layout width="match parent"
    android:layout height="wrap content"
    android:layout marginTop="30dp"
    android:gravity="center"
    android:text="CALCULATOR"
    android:textColor="#EEEDF1"
    android:textSize="40dp"
    android:textStyle="bold" />
  <EditText
    android:id="@+id/result"
    android:layout width="match parent"
    android:layout height="wrap content"
    android:layout marginTop="50dp"
    android:gravity="right"
    android:hint="0"
    android:textColor="#F6F4F4"
    android:textSize="40dp" />
  <LinearLayout
    android:layout_width="match_parent"
    android:layout height="wrap content"
    android:orientation="horizontal">
    <Button
       android:layout width="match parent"
       android:layout height="70dp"
       android:id="@+id/nine"
       android:text="9"
       android:textSize="25dp"
       android:layout_weight="1"
       android:backgroundTint="#8c8c8c"/>
     <Button
       android:layout width="match parent"
       android:layout_height="70dp"
       android:id="@+id/eight"
```

```
android:text="8"
    android:textSize="25dp"
    android:layout weight="1"
    android:backgroundTint="#8c8c8c"/>
  <Button
    android:layout width="match parent"
    android:layout height="70dp"
    android:id="@+id/seven"
    android:text="7"
    android:textSize="25dp"
    android:layout_weight="1"
    android:backgroundTint="#8c8c8c"/>
    android:layout width="match parent"
    android:layout height="70dp"
    android:id="@+id/plus"
    android:text="+"
    android:textSize="25dp"
    android:layout_weight="1"
    android:backgroundTint="#b35900"/>
</LinearLayout>
<LinearLavout
  android:layout width="match parent"
  android:layout height="wrap content"
  android:orientation="horizontal">
  <Button
    android:layout width="match parent"
    android:layout height="70dp"
    android:id="@+id/six"
    android:text="6"
    android:textSize="25dp"
    android:layout weight="1"
    android:backgroundTint="#8c8c8c"/>
  <Button
    android:layout width="match parent"
    android:layout height="70dp"
    android:id="@+id/five"
    android:text="5"
    android:textSize="25dp"
    android:layout_weight="1"
    android:backgroundTint="#8c8c8c"/>
  <Button
    android:layout width="match parent"
    android:layout height="70dp"
    android:id="@+id/four"
    android:text="4"
    android:textSize="25dp"
    android:layout weight="1"
    android:backgroundTint="#8c8c8c"/>
    android:layout width="match parent"
    android:layout height="70dp"
    android:id="@+id/minus"
    android:text="-"
    android:textSize="25dp"
    android:layout_weight="1"
    android:backgroundTint="#b35900"/>
</LinearLayout>
<LinearLayout
  android:layout width="match parent"
```

```
android:layout height="wrap content"
  android:orientation="horizontal">
  <Button
    android:layout width="match parent"
    android:layout height="70dp"
    android:id="@+id/three"
    android:text="3"
    android:textSize="25dp"
    android:layout_weight="1"
    android:backgroundTint="#8c8c8c"/>
  <Button
    android:layout width="match parent"
    android:layout height="70dp"
    android:id="@+id/two"
    android:text="2"
    android:textSize="25dp"
    android:layout weight="1"
    android:backgroundTint="#8c8c8c"/>
  <Button
    android:layout width="match parent"
    android:layout height="70dp"
    android:id="@+id/one"
    android:text="1"
    android:textSize="25dp"
    android:layout weight="1"
    android:backgroundTint="#8c8c8c"/>
  <Button
    android:layout width="match parent"
    android:layout height="70dp"
    android:id="@+id/mul"
    android:text="*"
    android:textSize="25dp"
    android:layout weight="1"
    android:backgroundTint="#b35900"/>
</LinearLayout>
<LinearLayout
  android:layout width="match parent"
  android:layout height="wrap content"
  android:orientation="horizontal">
  <Button
    android:layout width="match parent"
    android:layout height="70dp"
    android:id="@+id/dot"
    android:text="."
    android:textSize="25dp"
    android:layout_weight="1"
    android:backgroundTint="#8c8c8c"/>
  <Button
    android:layout_width="match_parent"
    android:layout height="70dp"
    android:id="@+id/zero"
    android:text="0"
    android:textSize="25dp"
    android:layout_weight="1"
    android:backgroundTint="#8c8c8c"/>
    android:layout width="match parent"
    android:layout height="70dp"
    android:id="@+id/modulas"
    android:text="%"
```

```
android:textSize="25dp"
    android:layout weight="1"
    android:backgroundTint="#8c8c8c"/>
  <Button
    android:layout width="match parent"
    android:layout height="70dp"
    android:id="@+id/division"
    android:text="/"
    android:textSize="25dp"
    android:layout_weight="1"
    android:backgroundTint="#b35900"/>
</LinearLayout>
<LinearLayout
  android:layout width="match parent"
  android:layout height="wrap content"
  android:orientation="horizontal">
<Button
  android:id="@+id/equals"
  android:layout_width="match_parent"
  android:layout height="70dp"
  android:text="="
  android:textSize="30dp"
  android:backgroundTint="#b35900"
  android:layout weight="1"
  android:height="30dp"/>
  <Button
    android:id="@+id/clear"
    android:layout width="match parent"
    android:layout height="wrap content"
    android:text="clear"
    android:height="70dp"
    android:backgroundTint="#b35900"
    android:layout_weight="1"/>
</LinearLayout>
```

</LinearLayout>

```
package com.example.calculater;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle:
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Switch;
public class MainActivity extends AppCompatActivity implements View.OnClickListener
nine,eight,seven,plus,six,five,four,minus,three,two,one,mul,dot,zero,modulas,division,clear,equals;
  EditText res:
  String operaterPressed=" ":
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    res=findViewById(R.id.result);
    nine=findViewById(R.id.nine);
    eight=findViewById(R.id.eight);
     seven=findViewById(R.id.seven);
     plus=findViewById(R.id.plus);
     six=findViewById(R.id.six);
    five=findViewById(R.id.five);
    four=findViewById(R.id.four);
    minus=findViewById(R.id.minus);
    three=findViewById(R.id.three);
    two=findViewById(R.id.two);
    one=findViewById(R.id.one);
    mul=findViewById(R.id.mul);
    dot=findViewById(R.id.dot);
    zero=findViewById(R.id.zero);
     modulas=findViewById(R.id.modulas);
    division=findViewById(R.id.division);
    clear=findViewById(R.id.clear);
    equals=findViewById(R.id.equals);
    nine.setOnClickListener(MainActivity.this);
     eight.setOnClickListener(MainActivity.this);
     seven.setOnClickListener(this);
     plus.setOnClickListener(this);
     six.setOnClickListener(this);
     five.setOnClickListener(this);
    four.setOnClickListener(this);
    minus.setOnClickListener(this);
    three.setOnClickListener(this);
    two.setOnClickListener(this);
    one.setOnClickListener(this);
    mul.setOnClickListener(this);
     dot.setOnClickListener(this);
    zero.setOnClickListener(this);
     modulas.setOnClickListener(this);
```

```
clear.setOnClickListener(this);
     equals.setOnClickListener(this);
  }
   @Override
  public void onClick(View view) {
     switch(view.getId()){
        case R.id.nine: res.append("9"); break;
        case R.id.eight: res.append("8"); break;
        case R.id.seven: res.append("7"); break; case R.id.plus: res.append("+"); operaterPressed="+";break; case R.id.six: res.append("6"); break;
        case R.id.five: res.append("5"); break;
        case R.id.four: res.append("4"); break;
        case R.id.minus: res.append("-"); operaterPressed="-"; break;
        case R.id.three: res.append("3"); break;
        case R.id.two: res.append("2"); break;
        case R.id.one: res.append("1"); break;
        case R.id.mul: res.append("*"); operaterPressed="*"; break;
        case R.id.dot: res.append("."); break;
        case R.id.zero: res.append("0"); break;
        case R.id.modulas: res.append("%"); operaterPressed="%"; break;
        case R.id.division: res.append("/"); operaterPressed="/"; break;
        case R.id.clear: res.setText(" "): break:
        case R.id.equals: double finalres=compute(res.getText().toString(),operaterPressed);
        res.setText(String.valueOt(finalres));
     }
  }
  private double compute(String toString, String operaterPressed) {
     String[] array=toString.split("\\+|-|\\*|\\/");
     double op1=Double.parseDouble(array[0]);
     double op2=Double.parseDouble(array[1]);
     switch (operaterPressed){
        case "+": return op1 + op2;
        case "-": return op1 +op2;
        case "*": return op1 +op2;
        case "/": return op1 +op2;
        case "%": return op1 +op2;
        default: return 0.00;
     }
}
```

OUTPUT:





