activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout</p>
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:id="@+id/main"
android:layout_width="match_parent" android:layout_height="match_parent"
android:background="@color/black" tools:context=".MainActivity">
  <LinearLayout
   android:layout_width="match_parent"
                                            android:layout_height="wrap_content"
android:orientation="vertical"
    app:layout_constraintBottom_toTopOf="@+id/tableLayout"
app:layout_constraintEnd_toEndOf="parent"
                                              android:padding="18dp">
    <TextView
      style="@style/Calc_Text_Input"
                                         android:layout_width="match_parent"
android:layout_height="wrap_content"
                                           android:text="2+2"
android:id="@+id/text_input"/>
    <TextView
      style="@style/Calc_Text_Answer"
                                           android:layout_width="match_parent"
android:layout_height="wrap_content"
                                           android:text="4"
      android:id="@+id/text_answer"/>
  </LinearLayout>
  <TableLayout
   android:layout_width="408dp"
                                     android:layout_height="450dp"
   app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintStart_toStartOf="parent"
                                               android:id="@+id/tableLayout">
    <TableRow>
      <androidx.appcompat.widget.AppCompatButton
android:id="@+id/button_delete"
                                       style="@style/Calc_Button_Delete"
android:text="Del" />
      <androidx.appcompat.widget.AppCompatButton
android:id="@+id/button_bracket_open"
                                              style="@style/Calc_Button_Action"
android:text="("/>
```

```
<androidx.appcompat.widget.AppCompatButton
android:id="@+id/button_bracket_closed"
                                              style="@style/Calc_Button_Action"
android:text=")" />
     <androidx.appcompat.widget.AppCompatButton
android:id="@+id/button_division" style="@style/Calc_Button_Action"
android:text="/" />
    </TableRow>
    <TableRow>
     <androidx.appcompat.widget.AppCompatButton
       android:id="@+id/button_seven"
                                             style="@style/Calc_Button_Digit"
android:text="7" />
     <androidx.appcompat.widget.AppCompatButton
       android:id="@+id/button_eight"
                                            style="@style/Calc_Button_Digit"
android:text="8" />
     <androidx.appcompat.widget.AppCompatButton
       android:id="@+id/button_nine"
                                            style="@style/Calc_Button_Digit"
android:text="9" />
     <androidx.appcompat.widget.AppCompatButton
android:id="@+id/button_multiplication" style="@style/Calc_Button_Action"
android:text="*"/>
    </TableRow>
    <TableRow>
     <androidx.appcompat.widget.AppCompatButton
       android:id="@+id/button_four" style="@style/Calc_Button_Digit"
android:text="4" />
     <androidx.appcompat.widget.AppCompatButton
       android:id="@+id/button_five" style="@style/Calc_Button_Digit"
android:text="5" />
     <\! and roidx. app compat. widget. App Compat Button
       android:id="@+id/button_six"
                                          style="@style/Calc_Button_Digit"
android:text="6" />
     <androidx.appcompat.widget.AppCompatButton
```

```
android:id="@+id/button_subtraction"
                                                  style="@style/Calc_Button_Action"
android:text="-" />
   </TableRow>
   <TableRow>
     <androidx.appcompat.widget.AppCompatButton</pre>
       android:id="@+id/button_one"
                                         style="@style/Calc_Button_Digit"
android:text="1" />
     <androidx.appcompat.widget.AppCompatButton
       android:id="@+id/button_two" style="@style/Calc_Button_Digit"
android:text="2" />
     <androidx.appcompat.widget.AppCompatButton
       android:id="@+id/button_three" style="@style/Calc_Button_Digit"
android:text="3" />
     <androidx.appcompat.widget.AppCompatButton
android:id="@+id/button_addition" style="@style/Calc_Button_Action"
android:text="+" />
   </TableRow>
   <TableRow>
     <androidx.appcompat.widget.AppCompatButton
       android:id="@+id/button_ac"
                                          style="@style/Calc_Button_Delete"
android:text="AC" />
     <androidx.appcompat.widget.AppCompatButton
       android:id="@+id/button_zero" style="@style/Calc_Button_Digit"
android:text="0" />
     <androidx.appcompat.widget.AppCompatButton
       android:id="@+id/button_point" style="@style/Calc_Button_Digit"
android:text="."/>
     <androidx.appcompat.widget.AppCompatButton
android:id="@+id/button_equality"
                                      style="@style/Calc_Button_Action"
android:text="=" />
   </TableRow>
  </TableLayout>
```

activity_splash.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.coordinatorlayout.widget.CoordinatorLayout</p>
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:fitsSystemWindows="true"
  tools:context=".Splash">
  <androidx.constraintlayout.widget.ConstraintLayout</p>
    android:layout_width="match_parent"
                                             android:layout_height="match_parent">
    <lmageView
      android:id="@+id/imageView2"
                                           android:layout width="189dp"
android:layout_height="207dp"
      app:layout_constraintBottom_toBottomOf="parent"
                                                             app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.5"
                                               app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
                                                app:layout_constraintVertical_bias="0.5"
app:srcCompat="@drawable/splash" />
    <TextView
      android:id="@+id/textView"
                                        android:layout_width="wrap_content"
android:layout_height="wrap_content"
                                           android:text="Calculator"
android:textSize="24sp"
      app:layout_constraintBottom_toTopOf="@+id/imageView2"
app:layout_constraintEnd_toEndOf="parent"
                                                app:layout_constraintHorizontal_bias="0.5"
app:layout_constraintStart_toStartOf="parent" />
  </androidx.constraintlayout.widget.ConstraintLayout>
</androidx.coordinatorlayout.widget.CoordinatorLayout>
```

MainActivity.kt

package com.example.calc3

```
import android.annotation.SuppressLint import android.graphics.Color import android.icu.text.DecimalFormat import android.os.Bundle import android.view.View
```

```
import androidx.activity.enableEdgeToEdge import
androidx.appcompat.app.AppCompatActivity import
androidx.core.view.ViewCompat import
androidx.core.view.WindowInsetsCompat
import com.example.calc3.databinding.ActivityMainBinding import
net.objecthunter.exp4j.Expression import
net.objecthunter.exp4j.ExpressionBuilder
class MainActivity : AppCompatActivity() {
  private lateinit var binding: ActivityMainBinding
  override fun onCreate(savedInstanceState: Bundle?) {
    super.onCreate(savedInstanceState)
                                           enableEdgeToEdge()
    binding = ActivityMainBinding.inflate(layoutInflater)
                                                           val view = binding.root
    setContentView(view)
    ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main)) { v, insets ->
      val systemBars =
insets.getInsets(WindowInsetsCompat.Type.systemBars())
      v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom)
                                                                                             insets
    binding.buttonZero.setOnClickListener {
                                                 addToInput("0")
    binding.buttonOne.setOnClickListener {
                                                addToInput("1")
    }
    binding.buttonTwo.setOnClickListener {
                                                addToInput("2")
    binding.buttonThree.setOnClickListener {
                                                  addToInput("3")
    binding.buttonFour.setOnClickListener {
                                                addToInput("4")
    binding.buttonFive.setOnClickListener {
                                                addToInput("5")
    binding.buttonSix.setOnClickListener {
                                               addToInput("6")
    }
```

```
binding.buttonSeven.setOnClickListener {
                                                 addToInput("7")
  }
  binding.buttonEight.setOnClickListener {
                                                addToInput("8")
  }
  binding.buttonNine.setOnClickListener {
                                                addToInput("9")
  binding.buttonDivision.setOnClickListener {
                                                   addToInput("/")
                                                       addToInput("*")
  binding.buttonMultiplication.setOnClickListener {
  binding.buttonSubtraction.setOnClickListener {
                                                      addToInput("-")
  }
  binding.buttonAddition.setOnClickListener {
                                                    addToInput("+")
  }
  binding.buttonBracketOpen.setOnClickListener {
                                                        addToInput("(")
  }
  binding.buttonBracketClosed.setOnClickListener{
                                                        addToInput(")")
  binding.buttonPoint.setOnClickListener { addToInput(".") }
  binding.buttonEquality.setOnClickListener {
                                                   equal()
  binding.buttonDelete.setOnClickListener {
                                                 delete()
  }
  binding.buttonAc.setOnClickListener {
                                              ac()
  }
private fun ac() {
  binding.textInput.text = ""
  updateAnswer()
```

```
binding.textInput.text =
  private fun delete() {
binding.textInput.text.toString().substring(0, binding.textInput.text.toString().length-1)\\
updateAnswer()
  private fun equal(): View.OnClickListener? {
    binding.textInput.text = binding.textAnswer.text.toString()
                                                                    return null
  @SuppressLint("SetTextl18n")
  private fun addToInput(s: String): View.OnClickListener? {
                                                                binding.textInput.append(s)
    updateAnswer()
                         return null
  private fun getInputExpression() : String {
                                                return
binding.textInput.text.toString()
  private fun updateAnswer() {
                                    try {
      val expression = getInputExpression()
      val result = ExpressionBuilder(expression).build().evaluate()
                                                                         binding.textAnswer.text =
DecimalFormat("0.####").format(result).toString()
    } catch (e: Exception) {
      binding.textAnswer.text = "";
    println(binding.textInput.text)
                                        println(binding.textAnswer.text)
```

