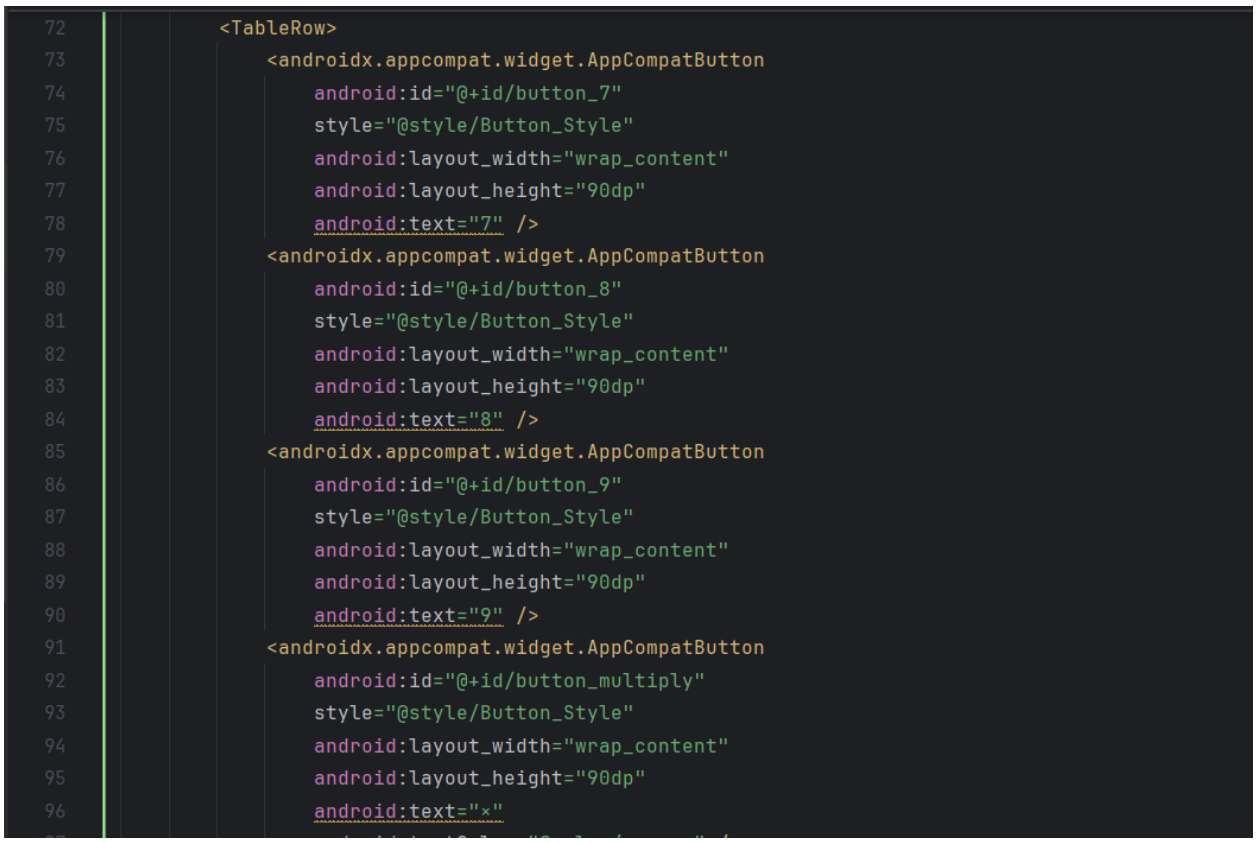
Activity_main.xml

Input/output

```
        <TextView
            android:id="@+id/input"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:gravity="end"
            android:textColor="@color/white"
            android:textSize="30sp"
            tools:text="5+10-3" />

        <TextView
            android:id="@+id/output"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:gravity="end"
            android:textColor="@color/neon_green"
            android:textSize="50sp"
            tools:text="12" />
```

<tablerow> кнопки калькулятора

```
    <TableRow>
        <androidx.appcompat.widget.AppCompatButton
            android:id="@+id/button_7"
            style="@style/Button_Style"
            android:layout_width="wrap_content"
            android:layout_height="90dp"
            android:text="7" />
        <androidx.appcompat.widget.AppCompatButton
            android:id="@+id/button_8"
            style="@style/Button_Style"
            android:layout_width="wrap_content"
            android:layout_height="90dp"
            android:text="8" />
        <androidx.appcompat.widget.AppCompatButton
            android:id="@+id/button_9"
            style="@style/Button_Style"
            android:layout_width="wrap_content"
            android:layout_height="90dp"
            android:text="9" />
        <androidx.appcompat.widget.AppCompatButton
            android:id="@+id/button_multiply"
            style="@style/Button_Style"
            android:layout_width="wrap_content"
            android:layout_height="90dp"
            android:text="×"
            android:textColor="@color/orange" />
```



```
<TableRow>
    <androidx.appcompat.widget.AppCompatButton
        android:id="@+id/button_7"
        style="@style/Button_Style"
        android:layout_width="wrap_content"
        android:layout_height="90dp"
        android:text="7" />
    <androidx.appcompat.widget.AppCompatButton
        android:id="@+id/button_8"
        style="@style/Button_Style"
        android:layout_width="wrap_content"
        android:layout_height="90dp"
        android:text="8" />
    <androidx.appcompat.widget.AppCompatButton
        android:id="@+id/button_9"
        style="@style/Button_Style"
        android:layout_width="wrap_content"
        android:layout_height="90dp"
        android:text="9" />
    <androidx.appcompat.widget.AppCompatButton
        android:id="@+id/button_multiply"
        style="@style/Button_Style"
        android:layout_width="wrap_content"
        android:layout_height="90dp"
        android:text="×"
```

Mainactivity.kt

AndroidManifest.xml | activity_main.xml | MainActivity.kt | styles.xml | strings.xml

```kotlin
package com.example.lab9

import android.os.Bundle
import android.widget.Button
import androidx.activity.enableEdgeToEdge
import android.widget.TextView
import androidx.appcompat.app.AppCompatActivity
import androidx.core.content.ContextCompat
import androidx.core.view.ViewCompat
import androidx.core.view.WindowInsetsCompat
import java.text.DecimalFormat
import net.objecthunter.exp4j.ExpressionBuilder


class MainActivity : AppCompatActivity() {

    private lateinit var input: TextView
    private lateinit var output: TextView

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        enableEdgeToEdge()
        setContentView(R.layout.activity_main)

        input = findViewById(R.id.input)
        output = findViewById(R.id.output)

        val btnClear: Button = findViewById(R.id.button_clear)
```

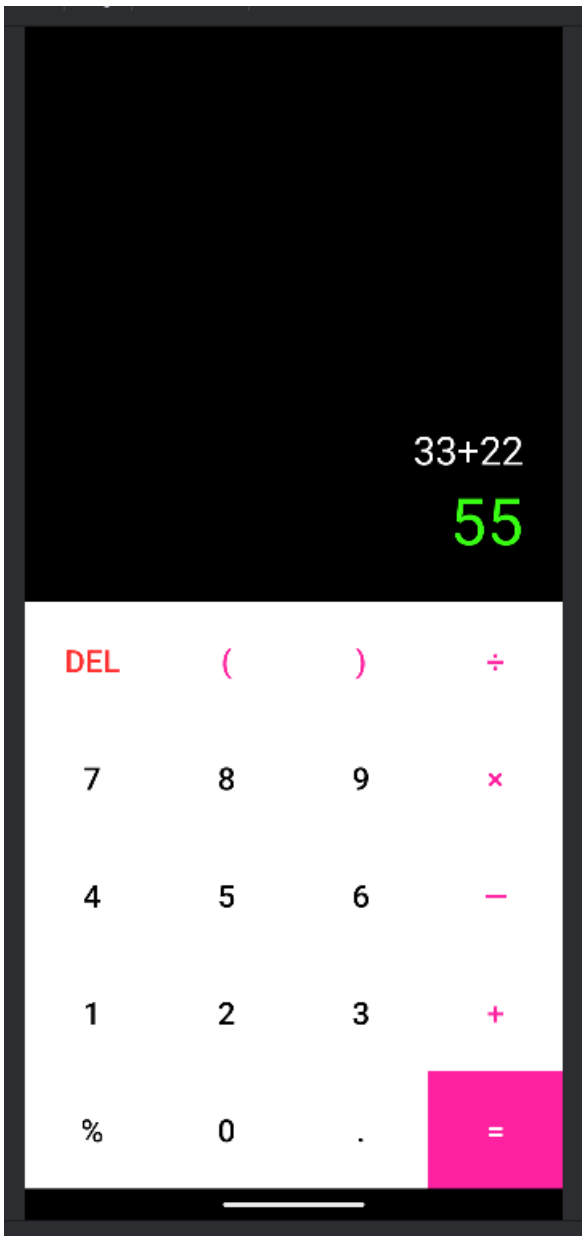
```kotlin
        val btnClear: Button = findViewById(R.id.button_clear)

        btnClear.setOnClickListener {
            input.text = ""
            output.text = ""
        }

        findViewById<Button>(R.id.button_bracket_left).setOnClickListener { addToInputText("(") }
        findViewById<Button>(R.id.button_bracket_right).setOnClickListener { addToInputText(")") }
        findViewById<Button>(R.id.button_0).setOnClickListener { addToInputText("0") }
        findViewById<Button>(R.id.button_1).setOnClickListener { addToInputText("1") }
        findViewById<Button>(R.id.button_2).setOnClickListener { addToInputText("2") }
        findViewById<Button>(R.id.button_3).setOnClickListener { addToInputText("3") }
        findViewById<Button>(R.id.button_4).setOnClickListener { addToInputText("4") }
        findViewById<Button>(R.id.button_5).setOnClickListener { addToInputText("5") }
        findViewById<Button>(R.id.button_6).setOnClickListener { addToInputText("6") }
        findViewById<Button>(R.id.button_7).setOnClickListener { addToInputText("7") }
        findViewById<Button>(R.id.button_8).setOnClickListener { addToInputText("8") }
        findViewById<Button>(R.id.button_9).setOnClickListener { addToInputText("9") }
        findViewById<Button>(R.id.button_dot).setOnClickListener { addToInputText(".") }
        findViewById<Button>(R.id.button_division).setOnClickListener { addToInputText("÷") }
        findViewById<Button>(R.id.button_multiply).setOnClickListener { addToInputText("x") }
        findViewById<Button>(R.id.button_subtraction).setOnClickListener { addToInputText("-") }
        findViewById<Button>(R.id.button_addition).setOnClickListener { addToInputText("+") }
        findViewById<Button>(R.id.button_equals).setOnClickListener { showResult() }
        findViewById<Button>(R.id.button_percent).setOnClickListener { addToInputText("%") }
```

```
        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
        }
    }

    private fun addToInputText(value: String) {
        input.append(value)
    }

    private fun getInputExpression(): String {

        return input.text.toString()
    }

    private fun showResult() {
        try {
            val expression = getInputExpression().replace("%", "/100")
            val result = ExpressionBuilder(expression).build().evaluate()
            output.text = DecimalFormat("0.######").format(result).toString()
            output.setTextColor(ContextCompat.getColor(this, R.color.neon_green))
        } catch (e: Exception) {
            output.text = "Ошибка"
            output.setTextColor(ContextCompat.getColor(this, R.color.red))
        }
```

Build.gradle.kts

```
dependencies {
    implementation("net.objecthunter:exp4j:0.4.8")
```

Запуск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