

AndroidManifest:

```
1  <?xml version="1.0" encoding="utf-8"?>
2  <manifest xmlns:android="http://schemas.android.com/apk/res/android"
3    xmlns:tools="http://schemas.android.com/tools">
4
5    <application
6      android:allowBackup="true"
7      android:dataExtractionRules="@xml/data_extraction_rules"
8      android:fullBackupContent="@xml/backup_rules"
9      android:icon="@mipmap/ic_launcher"
10     android:label="lesson Nine App"
11     android:roundIcon="@mipmap/ic_launcher_round"
12     android:supportsRtl="true"
13     android:theme="@style/Theme.LessonNineApp"
14     tools:targetApi="31">
15       <activity
16         android:name=".Splash_screen"
17         android:exported="true">
18         <intent-filter>
19           <action android:name="android.intent.action.MAIN" />
20
21           <category android:name="android.intent.category.LAUNCHER" />
22         </intent-filter>
23       </activity>
24       <activity
25         android:name=".MainActivity"
26         android:exported="true">
27         <intent-filter>
28           <action android:name="android.intent.action.MAIN" />
29
30           <category android:name="android.intent.category.LAUNCHER" />
31         </intent-filter>
32       </activity>
33     </application>
34
35  </manifest>
```

MainActivity:

```
1 package com.example.lessonnineapp
2
3 import android.icu.text.DecimalFormat
4 import android.os.Bundle
5 import androidx.activity.enableEdgeToEdge
6 import androidx.appcompat.app.AppCompatActivity
7 import androidx.core.content.ContextCompat
8 import androidx.core.view.ViewCompat
9 import androidx.core.view.WindowInsetsCompat
10 import com.example.lessonnineapp.databinding.ActivityMainBinding
11 import net.objecthunter.exp4j.ExpressionBuilder
12
13 class MainActivity : AppCompatActivity() {
14     private lateinit var binding: ActivityMainBinding
15     override fun onCreate(savedInstanceState: Bundle?) {
16         super.onCreate(savedInstanceState)
17         enableEdgeToEdge()
18         binding = ActivityMainBinding.inflate(layoutInflater)
19         setContentView(binding.root)
20         ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main)) { v, insets ->
21             val systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars())
22             v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom)
23             insets
24         }
25
26         binding.buttonClear.setOnClickListener {
27             binding.input.text = ""
28             binding.output.text = ""
29         }
30         binding.buttonBracketLeft.setOnClickListener {
31             addToInputText(" (")
32         }
33         binding.buttonBracketRight.setOnClickListener {
34             addToInputText(" )")
35         }
36         binding.button0.setOnClickListener {
37             addToInputText(" 0")
38         }
39         binding.button1.setOnClickListener {
40             addToInputText(" 1")
41         }
42         binding.button2.setOnClickListener {
43             addToInputText(" 2")
44         }
45     }
46 }
```

```

45         binding.button3.setOnClickListener {
46             addToInputText( value: "3")
47         }
48         binding.button4.setOnClickListener {
49             addToInputText( value: "4")
50         }
51         binding.button5.setOnClickListener {
52             addToInputText( value: "5")
53         }
54         binding.button6.setOnClickListener {
55             addToInputText( value: "6")
56         }
57         binding.button7.setOnClickListener {
58             addToInputText( value: "7")
59         }
60         binding.button8.setOnClickListener {
61             addToInputText( value: "8")
62         }
63         binding.button9.setOnClickListener {
64             addToInputText( value: "9")
65         }
66         binding.buttonDot.setOnClickListener {
67             addToInputText( value: ".")
68         }
69         binding.buttonDivision.setOnClickListener {
70             addToInputText( value: "/" )
71         }
72         binding.buttonMultiply.setOnClickListener {
73             addToInputText( value: "**")
74         }
75         binding.buttonSubtraction.setOnClickListener {
76             addToInputText( value: "-")
77         }
78         binding.buttonAddition.setOnClickListener {
79             addToInputText( value: "+")
80         }
81         binding.buttonEquals.setOnClickListener {
82             showResult()
83         }
84         binding.buttonPercent.setOnClickListener {
85             addToInputText( value: "%")
86         }

```

```

86     }
87
88 }
89
90 // Функция для добавления текста к полю ввода
91 private fun addToInputText(value: String) {
92     binding.input.append(value)// Добавляем переданное значение в конец поля ввода
93 }
94
95 // Функция для получения строки ввода
96 private fun getInputExpression(): String {
97     return binding.input.text.toString()// Возвращаем текст из поля ввода
98 }
99
100 // Функция для показа результата вычислений
101 private fun showResult() {
102     try {
103         val expression = getInputExpression().replace( oldValue: "%", newValue: "/100") // Заменяем % на соответствующее значение для деления
104         val result = ExpressionBuilder(expression).build().evaluate()
105         binding.output.text =
106             DecimalFormat( pattern: "0.#####").format(result).toString()
107         binding.output.setTextColor(
108             ContextCompat.getColor(
109                 context: this,
110                 R.color.neon_green
111             )
112         )
113     } catch (e: Exception) {
114         binding.output.text = "Ошибка"
115         binding.output.setTextColor(
116             ContextCompat.getColor(
117                 context: this,
118                 R.color.red
119             )
120         )
121     }
122 }

```

Splash_screen:

```
1 package com.example.lessonnineapp
2
3 > import ...
4
5
6
7
8
9
10
11 </> class Splash_screen : AppCompatActivity() {
12     @Override fun onCreate(savedInstanceState: Bundle?) {
13         super.onCreate(savedInstanceState)
14         enableEdgeToEdge()
15         setContentView(R.layout.activity_splash_screen)
16         ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main)) { v, insets ->
17             val systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars())
18             v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom)
19             insets
20         }
21         android.os.Handler(Looper.getMainLooper()).postDelayed({
22             val intent = Intent(packageContext, MainActivity::class.java)
23             startActivity(intent)
24         }, delayMillis: 2000)
25     }
26 }
```

activity_main:

```
1 <?xml version="1.0" encoding="utf-8"?>
2 <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3     xmlns:app="http://schemas.android.com/apk/res-auto"
4     xmlns:tools="http://schemas.android.com/tools"
5     android:id="@+id/main"
6     android:layout_width="match_parent"
7     android:layout_height="match_parent"
8     android:background="@color/black"
9     android:orientation="vertical"
10    tools:context=".MainActivity">
11
12    <LinearLayout
13        android:layout_width="match_parent"
14        android:layout_height="0dp"
15        android:layout_weight="1"
16        android:background="@color/black"
17        android:gravity="bottom"
18        android:orientation="vertical"
19        android:padding="30dp">
20
21        <TextView
22            android:id="@+id/input"
23            android:layout_width="match_parent"
24            android:layout_height="wrap_content"
25            android:gravity="end"
26            android:textColor="@color/white"
27            android:textSize="30sp"
28            tools:text="5+10=3" />
29
30        <TextView
31            android:id="@+id/output"
32            android:layout_width="match_parent"
33            android:layout_height="wrap_content"
34            android:gravity="end"
35            android:textColor="@color/neon_green"
36            android:textSize="50sp"
37            tools:text="12" />
38    </LinearLayout>
39
40    <TableLayout
41        android:layout_width="match_parent"
42        android:layout_height="wrap_content"
43        android:stretchColumns="*">
```

```
44 android:stretchColumns="**">
45
46 <TableRow>
47
48     <androidx.appcompat.widget.AppCompatButton
49         android:id="@+id/button_clear"
50         style="@style/Button_Style"
51         android:layout_width="wrap_content"
52         android:layout_height="90dp"
53         android:text="Del"
54         android:textColor="@color/red" />
55
56     <androidx.appcompat.widget.AppCompatButton
57         android:id="@+id/button_bracket_left"
58         style="@style/Button_Style"
59         android:layout_width="wrap_content"
60         android:layout_height="90dp"
61         android:text="("
62         android:textColor="@color/orange" />
63
64     <androidx.appcompat.widget.AppCompatButton
65         android:id="@+id/button_bracket_right"
66         style="@style/Button_Style"
67         android:layout_width="wrap_content"
68         android:layout_height="90dp"
69         android:text=")"
70         android:textColor="@color/orange" />
71
72     <androidx.appcompat.widget.AppCompatButton
73         android:id="@+id/button_division"
74         style="@style/Button_Style"
75         android:layout_width="wrap_content"
76         android:layout_height="90dp"
77         android:text="/"
78         android:textColor="@color/orange" />
79
80
81 </TableRow>
```

```

83 <TableRow>
84
85     <androidx.appcompat.widget.AppCompatButton
86         android:id="@+id/button_7"
87         style="@style/Button_Style"
88         android:layout_width="wrap_content"
89         android:layout_height="90dp"
90         android:text="7" />
91
92     <androidx.appcompat.widget.AppCompatButton
93         android:id="@+id/button_8"
94         style="@style/Button_Style"
95         android:layout_width="wrap_content"
96         android:layout_height="90dp"
97         android:text="8" />
98
99     <androidx.appcompat.widget.AppCompatButton
100         android:id="@+id/button_9"
101         style="@style/Button_Style"
102         android:layout_width="wrap_content"
103         android:layout_height="90dp"
104         android:text="9" />
105
106     <androidx.appcompat.widget.AppCompatButton
107         android:id="@+id/button_multiply"
108         style="@style/Button_Style"
109         android:layout_width="wrap_content"
110         android:layout_height="90dp"
111         android:text="*"
112         android:textColor="@color/orange" />
113
114 </TableRow>
115
116 <TableRow>
117
118     <androidx.appcompat.widget.AppCompatButton
119         android:id="@+id/button_4"
120         style="@style/Button_Style"
121         android:layout_width="wrap_content"
122         android:layout_height="90dp"
123         android:text="4" />

```

```

124
125         <androidx.appcompat.widget.AppCompatButton
126             android:id="@+id/button_5"
127             style="@style/Button_Style"
128             android:layout_width="wrap_content"
129             android:layout_height="90dp"
130             android:text="5" />
131
132         <androidx.appcompat.widget.AppCompatButton
133             android:id="@+id/button_6"
134             style="@style/Button_Style"
135             android:layout_width="wrap_content"
136             android:layout_height="90dp"
137             android:text="6" />
138
139         <androidx.appcompat.widget.AppCompatButton
140             android:id="@+id/button_subtraction"
141             style="@style/Button_Style"
142             android:layout_width="wrap_content"
143             android:layout_height="90dp"
144             android:text="-"
145             android:textColor="@color/orange" />
146
147     </TableRow>
148
149     <TableRow>
150
151         <androidx.appcompat.widget.AppCompatButton
152             android:id="@+id/button_1"
153             style="@style/Button_Style"
154             android:layout_width="wrap_content"
155             android:layout_height="90dp"
156             android:text="1" />
157
158         <androidx.appcompat.widget.AppCompatButton
159             android:id="@+id/button_2"
160             style="@style/Button_Style"
161             android:layout_width="wrap_content"
162             android:layout_height="90dp"

```



```

166         <androidx.appcompat.widget.AppCompatButton
171             android:text="3" />
172
173         <androidx.appcompat.widget.AppCompatButton
174             android:id="@+id/button_addition"
175             style="@style/Button_Style"
176             android:layout_width="wrap_content"
177             android:layout_height="90dp"
178             android:text="+"
179             android:textColor="@color/orange" />
180
181     </TableRow>
182
183     <TableRow>
184
185         <androidx.appcompat.widget.AppCompatButton
186             android:id="@+id/button_percent"
187             style="@style/Button_Style"
188             android:layout_width="wrap_content"
189             android:layout_height="90dp"
190             android:text="%" />
191
192         <androidx.appcompat.widget.AppCompatButton
193             android:id="@+id/button_0"
194             style="@style/Button_Style"
195             android:layout_width="wrap_content"
196             android:layout_height="90dp"
197             android:text="0" />
198         <androidx.appcompat.widget.AppCompatButton
199             android:id="@+id/button_dot"
200             style="@style/Button_Style"
201             android:layout_width="wrap_content"
202             android:layout_height="90dp"
203             android:text="." />
204         <androidx.appcompat.widget.AppCompatButton
205             android:id="@+id/button_equals"
206             style="@style/Button_Style"
207             android:layout_width="wrap_content"
208             android:layout_height="90dp"
209             android:background="@color/orange"
210             android:text="="

```

activity_splash_screen:

```
1 <?xml version="1.0" encoding="utf-8"?>
2 <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3     xmlns:app="http://schemas.android.com/apk/res-auto"
4     xmlns:tools="http://schemas.android.com/tools"
5     android:id="@+id/main"
6     android:layout_width="match_parent"
7     android:layout_height="match_parent"
8     android:orientation="vertical"
9     tools:context=".Splash_screen">
10
11     <ImageView
12         android:layout_width="match_parent"
13         android:layout_height="match_parent"
14         android:src="@drawable/wombat"/>
15
16 </LinearLayout>
```

colors:

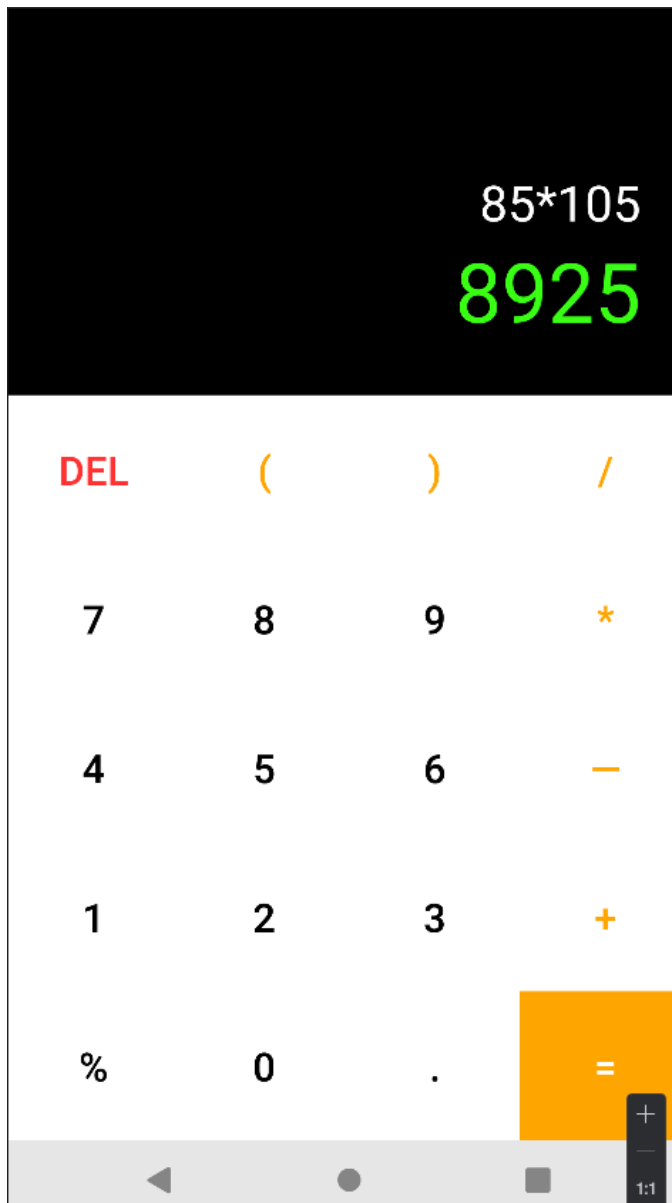
```
1 <?xml version="1.0" encoding="utf-8"?>
2 <resources>
3     <color name="black">#FF000000</color>
4     <color name="white">#FFFFFFFF</color>
5     <color name="purple_200">#FFBB86FC</color>
6     <color name="purple_500">#FF6200EE</color>
7     <color name="purple_700">#FF3700B3</color>
8     <color name="teal_200">#FF03DAC5</color>
9     <color name="teal_700">#FF018786</color>
10    <color name="red">#FF3131</color>
11    <color name="pink">#FFC0CB</color>
12    <color name="orange">#FFA500</color>
13    <color name="neon_green">#39FF14</color>
14
15    <style name="Button_Style" parent="Widget.AppCompat.Button.Colored">
16        <item name="android:background">@color/white</item>
17        <item name="android:textSize">24sp</item>
18        <item name="android:textColor">@color/black</item>
19        <item name="android:gravity">center</item>
20    </style>
21 </resources>
```

build.gradle.kts:


```
36     buildFeatures {
37         |     viewBinding = true
38     }
39 }
40
41 dependencies {
42
43     implementation(libs.androidx.core.ktx)
44     implementation(libs.androidx.appcompat)
45     implementation(libs.material)
46     implementation(libs.androidx.activity)
47     implementation(libs.androidx.constraintlayout)
48     testImplementation(libs.junit)
49     androidTestImplementation(libs.androidx.junit)
50      androidTestImplementation(libs.androidx.espresso.core)
51     implementation ("net.objecthunter:exp4j:0.4.8")
52 }
```

result:





[veenorth/lessonNineApp](#) on Nov 10

 **Delete settings.gradle.kts** #1

create_cal_prj ← master