

Практика номер 11 Кирюшкин Артём ИС221

```
MainActivity.kt activity_main.xml shapefororange.xml activity_splash_screen.xml colors.xml x
1 <?xml version="1.0" encoding="utf-8"?>
2 <resources>
3   <color name="purple_200">#FFB886FC</color>
4   <color name="purple_500">#FF6200EE</color>
5   <color name="purple_700">#FF3700B3</color>
6   <color name="teal_200">#FF03DAC5</color>
7   <color name="teal_700">#FF018786</color>
8   <color name="black">#FF000000</color>
9   <color name="white">#FFFFFFFF</color>
10  <color name="red">#FFFFFF</color>
11  <color name="pink">#FFC0CB</color>
12  <color name="orange">#9C27B0</color>
13  <color name="neon_green">#39FF14</color>
14  <color name="semiblack">#202020</color>
15  <color name="gray">#6B6B6B</color>
16  <style name="Button_Style" parent="Widget.AppCompat.Button.Colored">
17    <item name="android:textSize">50sp</item>
18    <item name="android:textColor">@color/white</item>
19    <item name="android:gravity">center</item>
20    <item name="android:background">@drawable/shape</item>
21    <item name="android:layout_margin">5dp</item>
22  </style>
23 </resources>
24
```

```
MainActivity.kt activity_main.xml x activity_splash_screen.xml colors.xml
1 <?xml version="1.0" encoding="utf-8"?>
2 <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3   xmlns:tools="http://schemas.android.com/tools"
4   android:id="@+id/main"
5   android:layout_width="match_parent"
6   android:layout_height="match_parent"
7   android:background="@color/black"
8   android:orientation="vertical"
9   tools:context=".MainActivity">
10  <LinearLayout
11    android:layout_width="match_parent"
12    android:layout_height="0dp"
13    android:layout_weight="1"
14    android:background="@color/black"
15    android:gravity="bottom"
16    android:orientation="vertical"
17    android:padding="10dp">
18    <TextView
19      android:id="@+id/input"
20      android:layout_width="match_parent"
21      android:layout_height="wrap_content"
22      android:gravity="end"
23      android:textColor="@color/white"
24      android:textSize="50sp"
25      tools:text="5+10=3" />
26    <TextView
27      android:id="@+id/output"
28      android:layout_width="match_parent"
29      android:layout_height="wrap_content"
30      android:gravity="end"
31      android:textColor="@color/white"
32      android:textSize="72sp"
33      tools:text="12" />
34  </LinearLayout>
35 </LinearLayout>
```

```
MainActivity.kt activity_main.xml activity_splash_screen.xml colors.xml
1 <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
9 <LinearLayout
33 </LinearLayout>
34 <TableLayout
35     android:layout_width="match_parent"
36     android:layout_height="wrap_content"
37     android:layout_margin="10dp"
38     android:stretchColumns="*">
39     <TableRow>
40         <androidx.appcompat.widget.AppCompatButton
41             android:id="@+id/button_clear"
42             style="@style/Button_Style"
43             android:layout_width="wrap_content"
44             android:layout_height="90dp"
45             android:text="AC"
46             android:textColor="@color/white"
47             android:background="@drawable/shapefortop"/>
48         <androidx.appcompat.widget.AppCompatButton
49             android:id="@+id/button_bracket_left"
50             style="@style/Button_Style"
51             android:layout_width="wrap_content"
52             android:layout_height="90dp"
53             android:text="{"
54             android:background="@drawable/shapefortop"
55             android:textColor="@color/white" />
56         <androidx.appcompat.widget.AppCompatButton
57             android:id="@+id/button_bracket_right"
58             style="@style/Button_Style"
59             android:layout_width="wrap_content"
60             android:background="@drawable/shapefortop"
61             android:layout_height="90dp"
62             android:text=")" />
MainActivity.kt activity_main.xml activity_splash_screen.xml colors.xml
1 <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
34 <TableLayout
39 <TableRow>
63     android:textColor="@color/white" />
64     <androidx.appcompat.widget.AppCompatButton
65         android:id="@+id/button_division"
66         style="@style/Button_Style"
67         android:layout_width="wrap_content"
68         android:layout_height="90dp"
69         android:text="/"
70         android:background="@drawable/shapefororange"
71         android:textColor="@color/white" />
72 </TableRow>
73 <TableRow>
74     <androidx.appcompat.widget.AppCompatButton
75         android:id="@+id/button_7"
76         style="@style/Button_Style"
77         android:layout_width="wrap_content"
78         android:layout_height="90dp"
79         android:text="7" />
80     <androidx.appcompat.widget.AppCompatButton
81         android:id="@+id/button_8"
82         style="@style/Button_Style"
83         android:layout_width="wrap_content"
84         android:layout_height="90dp"
85         android:text="8" />
86     <androidx.appcompat.widget.AppCompatButton
87         android:id="@+id/button_9"
88         style="@style/Button_Style"
89         android:layout_width="wrap_content"
90         android:layout_height="90dp"
91         android:text="9" />
```

```
MainActivity.kt activity_main.xml activity_splash_screen.xml colors.xml
1 <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
34 <TableLayout
73 <TableRow>
86 <androidx.appcompat.widget.AppCompatButton
91 <android:text="9" />
92 <androidx.appcompat.widget.AppCompatButton
93 <android:id="@+id/button_multiply"
94 <style="@style/Button_Style"
95 <android:layout_width="wrap_content"
96 <android:layout_height="90dp"
97 <android:text="x"
98 <android:background="@drawable/shapefororange"
99 <android:textColor="@color/white" />
100 </TableRow>
101 <TableRow>
102 <androidx.appcompat.widget.AppCompatButton
103 <android:id="@+id/button_4"
104 <style="@style/Button_Style"
105 <android:layout_width="wrap_content"
106 <android:layout_height="90dp"
107 <android:text="4" />
108 <androidx.appcompat.widget.AppCompatButton
109 <android:id="@+id/button_5"
110 <style="@style/Button_Style"
111 <android:layout_width="wrap_content"
112 <android:layout_height="90dp"
113 <android:text="5" />
114 <androidx.appcompat.widget.AppCompatButton
115 <android:id="@+id/button_6"
116 <style="@style/Button_Style"
117 <android:layout_width="wrap_content"
118 <android:layout_height="90dp"
119 </TableRow>
120 <TableRow>
121 <androidx.appcompat.widget.AppCompatButton
122 <android:id="@+id/button_subtraction"
123 <style="@style/Button_Style"
124 <android:layout_width="wrap_content"
125 <android:layout_height="90dp"
126 <android:text="-"
127 <android:background="@drawable/shapefororange"
128 <android:textColor="@color/white" />
129 </TableRow>
130 <TableRow>
131 <androidx.appcompat.widget.AppCompatButton
132 <android:id="@+id/button_1"
133 <style="@style/Button_Style"
134 <android:layout_width="wrap_content"
135 <android:layout_height="90dp"
136 <android:text="1" />
137 <androidx.appcompat.widget.AppCompatButton
138 <android:id="@+id/button_2"
139 <style="@style/Button_Style"
140 <android:layout_width="wrap_content"
141 <android:layout_height="90dp"
142 <android:text="2" />
143 <androidx.appcompat.widget.AppCompatButton
144 <android:id="@+id/button_3"
145 <style="@style/Button_Style"
146 <android:layout_width="wrap_content"
147 <android:layout_height="90dp"
148 <android:text="3" />
149 </TableRow>
150 </TableLayout>
151 </LinearLayout>
```

```
MainActivity.kt activity_main.xml activity_splash_screen.xml colors.xml
1 <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
34 <TableLayout
129 <TableRow>
147 <androidx.appcompat.widget.AppCompatButton
148 android:id="@+id/button_addition"
149 style="@style/Button_Style"
150 android:layout_width="wrap_content"
151 android:layout_height="90dp"
152 android:text="+"
153 android:background="@drawable/shapefororange"
154 android:textColor="@color/white" />
155 </TableRow>
156 <TableRow>
157 <androidx.appcompat.widget.AppCompatButton
158 android:id="@+id/button_percent"
159 style="@style/Button_Style"
160 android:layout_width="wrap_content"
161 android:layout_height="90dp"
162 android:text="%" />
163 <androidx.appcompat.widget.AppCompatButton
164 android:id="@+id/button_0"
165 style="@style/Button_Style"
166 android:layout_width="wrap_content"
167 android:layout_height="90dp"
168 android:text="0" />
169 <androidx.appcompat.widget.AppCompatButton
170 android:id="@+id/button_dot"
171 style="@style/Button_Style"
172 android:layout_width="wrap_content"
173 android:layout_height="90dp"
174 android:text="." />
175 </TableRow>
MainActivity.kt activity_main.xml activity_splash_screen.xml colors.xml
1 <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
34 <TableLayout
157 <TableRow>
164 <androidx.appcompat.widget.AppCompatButton
166 style="@style/Button_Style"
167 android:layout_width="wrap_content"
168 android:layout_height="90dp"
169 android:text="0" />
170 <androidx.appcompat.widget.AppCompatButton
171 android:id="@+id/button_dot"
172 style="@style/Button_Style"
173 android:layout_width="wrap_content"
174 android:layout_height="90dp"
175 android:text="." />
176 <androidx.appcompat.widget.AppCompatButton
177 android:id="@+id/button_equals"
178 style="@style/Button_Style"
179 android:layout_width="wrap_content"
180 android:layout_height="90dp"
181 android:background="@drawable/shapefororange"
182 android:text="="
183 android:textSize="50dp"
184 android:textColor="@color/white" />
185 </TableRow>
186 </TableLayout>
187 </LinearLayout>
```

```
MainActivity.kt  </> activity_main.xml  </> activity_splash_screen.xml  </> colors.xml
1  <?xml version="1.0" encoding="utf-8"?>
2  <androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      android:layout_width="match_parent"
4      android:layout_height="match_parent">
5
6      <TextView
7          android:layout_width="match_parent"
8          android:layout_height="match_parent"
9          android:text="3АПV3KA..."
10         android:textColor="#37074B"
11         android:gravity="center"
12         android:textSize="40sp"
13         android:textStyle="bold">
14     </TextView>
15 </androidx.constraintlayout.widget.ConstraintLayout>

package com.onlylose.ex9

import ...

class MainActivity : AppCompatActivity() {
    private lateinit var binding: ActivityMainBinding
    override fun onCreate(savedInstanceState: Bundle?) {
        binding = ActivityMainBinding.inflate(layoutInflater)
        super.onCreate(savedInstanceState)
        enableEdgeToEdge()
        setContentView(binding.root)
        var sound = MediaPlayer()
        binding.buttonClear.setOnClickListener {
            binding.input.text = " "
            binding.output.text = " "
        }
        binding.buttonBracketLeft.setOnClickListener {
            sound.setAudioStreamType(AudioManager.STREAM_MUSIC)
            if (!sound.isPlaying) {
                try {
                    sound.setDataSource(context, Uri.parse("android.resource://" + this.packageName + "/" + R.raw.click))
                    sound.prepareAsync()
                    sound.start()
                } catch (e: IOException) {
                    e.printStackTrace()
                }
            } else {
                try {
                    sound.stop()
                    sound.release()
                    sound = MediaPlayer()
                } catch (e: IOException) {
                    e.printStackTrace()
                }
            }
        }
    }
}

class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        binding.buttonBracketLeft.setOnClickListener {
            }
        }
        addToInputText(value: "(")
    }
    binding.buttonBracketRight.setOnClickListener {
        addToInputText(value: ")")
    }
    binding.button0.setOnClickListener {
        addToInputText(value: "0")
    }
    binding.button1.setOnClickListener {
        addToInputText(value: "1")
    }
    binding.button2.setOnClickListener {
        addToInputText(value: "2")
    }
    binding.button3.setOnClickListener {
        addToInputText(value: "3")
    }
    binding.button4.setOnClickListener {
        addToInputText(value: "4")
    }
    binding.button5.setOnClickListener {
        addToInputText(value: "5")
    }
    binding.button6.setOnClickListener {
        addToInputText(value: "6")
    }
    binding.button7.setOnClickListener {
```

```
MainActivity.kt x </> activity_main.xml </> activity_splash_screen.xml </> colors.xml
17 class MainActivity : AppCompatActivity() {
19     override fun onCreate(savedInstanceState: Bundle?) {
75         addToInputText( value: "7")
76     }
77     binding.button8.setOnClickListener {
78         addToInputText( value: "8")
79     }
80     binding.button9.setOnClickListener {
81         addToInputText( value: "9")
82     }
83     binding.buttonDot.setOnClickListener {
84         addToInputText( value: ".")
85     }
86     binding.buttonDivision.setOnClickListener {
87         addToInputText( value: "÷")
88     }
89     binding.buttonMultiply.setOnClickListener {
90         addToInputText( value: "x")
91     }
92     binding.buttonSubtraction.setOnClickListener {
93         addToInputText( value: "-")
94     }
95     binding.buttonAddition.setOnClickListener {
96         addToInputText( value: "+")
97     }
98     binding.buttonEquals.setOnClickListener {
99         showResult()
100     }
101     binding.buttonPercent.setOnClickListener {
102         addToInputText( value: "%")
103     }
104     }
MainActivity.kt x </> activity_main.xml </> activity_splash_screen.xml </> colors.xml
17 class MainActivity : AppCompatActivity() {
19     override fun onCreate(savedInstanceState: Bundle?) {
101         binding.buttonPercent.setOnClickListener {
102             addToInputText( value: "%")
103         }
104     }
105
106     private fun addToInputText(value: String) {
107         binding.input.append(value)
108     }
109
110     private fun getInputExpression(): String {
111         return binding.input.text.toString()
112     }
113
114     private fun showResult() {
115         try {
116             val expression = getInputExpression().replace( oldValue: "%", newValue: "/100")
117             val result = ExpressionBuilder(expression).build().evaluate()
118             binding.output.text = DecimalFormat( pattern: "0.#####").format(result).toString()
119         } catch (e: Exception) {
120             binding.output.text = "0шнбкв"
121             binding.output.setTextColor(ContextCompat.getColor( context: this, R.color.red))
122         }
123     }
124
125 }
```

