Практика номер 9 Кирюшкин Артём ИС221

```xml
MainActivity.kt    activity_main.xml    shapefororange.xml    activity_splash_screen.xml    colors.xml ×

1   <?xml version="1.0" encoding="utf-8"?>
2   <resources>
3       <color name="purple_200">#FFBB86FC</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
```

```xml
MainActivity.kt    activity_main.xml ×    activity_splash_screen.xml    colors.xml

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

```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=")"
```

```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" />
```

```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="×"
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"
```

```xml
1   <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
34      <TableLayout
101         <TableRow>
114             <androidx.appcompat.widget.AppCompatButton
118                 android:layout_height="90dp"
119                 android:text="6" />
120             <androidx.appcompat.widget.AppCompatButton
121                 android:id="@+id/button_subtraction"
122                 style="@style/Button_Style"
123                 android:layout_width="wrap_content"
124                 android:layout_height="90dp"
125                 android:text="−"
126                 android:background="@drawable/shapefororange"
127                 android:textColor="@color/white" />
128         </TableRow>
129         <TableRow>
130             <androidx.appcompat.widget.AppCompatButton
131                 android:id="@+id/button_1"
132                 style="@style/Button_Style"
133                 android:layout_width="wrap_content"
134                 android:layout_height="90dp"
135                 android:text="1" />
136             <androidx.appcompat.widget.AppCompatButton
137                 android:id="@+id/button_2"
138                 style="@style/Button_Style"
139                 android:layout_width="wrap_content"
140                 android:layout_height="90dp"
141                 android:text="2" />
142             <androidx.appcompat.widget.AppCompatButton
143                 android:id="@+id/button_3"
144                 style="@style/Button_Style"
145                 android:layout_width="wrap_content"
```

```xml
1    <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
34        <TableLayout
129            <TableRow>
147                    android:text="3" />
148                <androidx.appcompat.widget.AppCompatButton
149                    android:id="@+id/button_addition"
150                    style="@style/Button_Style"
151                    android:layout_width="wrap_content"
152                    android:layout_height="90dp"
153                    android:text="+"
154                    android:background="@drawable/shapefororange"
155                    android:textColor="@color/white" />
156            </TableRow>
157            <TableRow>
158                <androidx.appcompat.widget.AppCompatButton
159                    android:id="@+id/button_percent"
160                    style="@style/Button_Style"
161                    android:layout_width="wrap_content"
162                    android:layout_height="90dp"
163                    android:text="%" />
164                <androidx.appcompat.widget.AppCompatButton
165                    android:id="@+id/button_0"
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="." />
```

```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>
```

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <TextView
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:text="ЗАГРУЗКА..."
        android:textColor="#37074B"
        android:gravity="center"
        android:textSize="40sp"
        android:textStyle="bold">
    </TextView>
</androidx.constraintlayout.widget.ConstraintLayout>
```

```kotlin
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: this, Uri.parse( uriString: "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) {
```

```kotlin
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 {
```

```kotlin
17          class MainActivity : AppCompatActivity() {
19              override fun onCreate(savedInstanceState: Bundle?) {

74                  binding.button7.setOnClickListener {
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: "*")
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                 }
```

```kotlin
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 = "Ошибка"
121                     binding.output.setTextColor(ContextCompat.getColor( context: this, R.color.red))
122                 }
123             }
124
125         }
```

ЗАГРУЗКА...

2*2+6/4

5.5

AC	(	)	÷
7	8	9	×
4	5	6	−
1	2	3	+
%	0	.	=