

```

1 package com.onlylose.ex9
2
3 import androidx.appcompat.app.AppCompatActivity
4
5 class MainActivity : AppCompatActivity() {
6     private lateinit var binding: ActivityMainBinding
7
8     override fun onCreate(savedInstanceState: Bundle?) {
9         binding = ActivityMainBinding.inflate(layoutInflater)
10         super.onCreate(savedInstanceState)
11         setContentView(binding.root)
12         binding.buttonClear.setOnClickListener {
13             binding.input.text = ""
14             binding.output.text = ""
15         }
16         binding.buttonBracketLeft.setOnClickListener {
17             sound.setAudioStreamType(AudioManager.STREAM_MUSIC)
18             if (!sound.isPlaying) {
19                 try {
20                     sound.setDataSource(context, Uri.parse("android.resource://" + this.packageName + "/" + R.raw.click))
21                     sound.prepareAsync()
22                     sound.start()
23                 } catch (e: IOException) {
24                     e.printStackTrace()
25                 }
26             } else {
27                 try {
28                     sound.stop()
29                     sound.release()
30                 } catch (e: IOException) {
31                     e.printStackTrace()
32                 }
33             }
34             sound = MediaPlayer()
35         }
36     }
37 }

```

```
17 class MainActivity : AppCompatActivity() {
19     override fun onCreate(savedInstanceState: Bundle?) {
29         binding.buttonBracketLeft.setOnClickListener {
43             sound = MediaPlayer()
44         } catch (e: IOException) {
45             e.printStackTrace()
46         }
47     }
48     addToInputText( value: "(")
49 }
50 binding.buttonBracketRight.setOnClickListener {
51     addToInputText( value: ")")
52 }
53 binding.button0.setOnClickListener {
54     addToInputText( value: "0")
55 }
56 binding.button1.setOnClickListener {
57     addToInputText( value: "1")
58 }
59 binding.button2.setOnClickListener {
60     addToInputText( value: "2")
61 }
62 binding.button3.setOnClickListener {
63     addToInputText( value: "3")
64 }
65 binding.button4.setOnClickListener {
66     addToInputText( value: "4")
67 }
68 binding.button5.setOnClickListener {
69     addToInputText( value: "5")
70 }
71 binding.button6.setOnClickListener {
```

MainActivity.kt x </> activity\_main.xml </> activity\_splash\_screen.xml </> colors.xml

```

17 class MainActivity : AppCompatActivity() {
19     override fun onCreate(savedInstanceState: Bundle?) {
20         // ...
21         binding.button6.setOnClickListener {
22             addToInputText(value: "6")
23         }
24         binding.button7.setOnClickListener {
25             addToInputText(value: "7")
26         }
27         binding.button8.setOnClickListener {
28             addToInputText(value: "8")
29         }
30         binding.button9.setOnClickListener {
31             addToInputText(value: "9")
32         }
33         binding.buttonDot.setOnClickListener {
34             addToInputText(value: ".")
35         }
36         binding.buttonDivision.setOnClickListener {
37             addToInputText(value: "/")
38         }
39         binding.buttonMultiply.setOnClickListener {
40             addToInputText(value: "*")
41         }
42         binding.buttonSubtraction.setOnClickListener {
43             addToInputText(value: "-")
44         }
45         binding.buttonAddition.setOnClickListener {
46             addToInputText(value: "+")
47         }
48         binding.buttonEquals.setOnClickListener {
49             showResult()
50         }
51     }
52 }

```

MainActivity.kt x SplashScreen.kt </> activity\_main.xml </> activity\_splash\_screen.xml </> colors.xml

```

17 class MainActivity : AppCompatActivity() {
19     override fun onCreate(savedInstanceState: Bundle?) {
20         // ...
21         binding.buttonPercent.setOnClickListener {
22             addToInputText(value: "%")
23         }
24     }
25
26     private fun addToInputText(value: String) {
27         binding.input.append(value)
28     }
29
30     private fun getInputExpression(): String {
31         return binding.input.text.toString()
32     }
33
34     private fun showResult() {
35         try {
36             val expression = getInputExpression().replace(oldValue: "%", newValue: "/100")
37             val result = ExpressionBuilder(expression).build().evaluate()
38             binding.output.text = DecimalFormat(pattern: "0.#####").format(result).toString()
39         } catch (e: Exception) {
40             binding.output.text = "Ошибка"
41             binding.output.setTextColor(ContextCompat.getColor(context: this, R.color.red))
42         }
43     }
44 }
45
46 }

```

```
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" />
```

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
73      <TableRow>
86      <androidx.appcompat.widget.AppCompatButton
89      <android:layout_width="wrap_content"
90      <android:layout_height="90dp"
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
101      </TableRow>
102      <TableRow>
103      <androidx.appcompat.widget.AppCompatButton
104      <android:id="@+id/button_4"
105      <style="@style/Button_Style"
106      <android:layout_width="wrap_content"
107      <android:layout_height="90dp"
108      <android:text="4" />
109      <androidx.appcompat.widget.AppCompatButton
110      <android:id="@+id/button_5"
111      <style="@style/Button_Style"
112      <android:layout_width="wrap_content"
113      <android:layout_height="90dp"
114      <android:text="5" />
115      <androidx.appcompat.widget.AppCompatButton
116      <android:id="@+id/button_6"
117      <style="@style/Button_Style"

```



MainActivity.kt activity\_main.xml x activity\_splash\_screen.xml colors.xml

```

1      <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
34          <TableLayout
101          <TableRow>
114              <androidx.appcompat.widget.AppCompatButton
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"
146                  android:layout_height="90dp"

```



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>
142      <androidx.appcompat.widget.AppCompatButton
146          android:layout_height="90dp"
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"

```

```
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="ЗАГРУЗКА КАЛЬКУЛЯТОРА..."
10         android:textColor="@color/black"
11         android:gravity="center"
12         android:textSize="40sp"
13         android:textStyle="bold">
14  </TextView>
15 </androidx.constraintlayout.widget.ConstraintLayout>
```

```
MainActivity.kt  activity_main.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">#FFA500</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>
```

