```
1 <?xml version="1.0" encoding="utf-8"?>
 2 <androidx.constraintlayout.widget.ConstraintLayout xmlns:</pre>
   android="http://schemas.android.com/apk/res/android"
       xmlns:app="http://schemas.android.com/apk/res-auto"
3
       xmlns:tools="http://schemas.android.com/tools"
4
 5
       android:layout_width="match_parent"
       android:layout_height="match_parent"
6
       tools:context=".MainActivity">
7
8
9
       <LinearLayout</pre>
           android:layout width="match parent"
10
           android:layout_height="0dp"
11
           android:orientation="vertical"
12
           android:weightSum="2"
13
           app:layout constraintBottom toTopOf="@+id/
14
   linearLayout"
15
           app:layout_constraintEnd_toEndOf="parent"
           app:layout constraintStart toStartOf="parent"
16
           app:layout constraintTop toTopOf="parent" >
17
18
19
           <TextView
20
21
               android:id="@+id/data"
22
               android:layout width="match parent"
               android:layout_height="0dp"
23
               android:layout_weight="1"
24
               android:background="#1d1d1d"
25
               android:gravity="end|bottom"
26
27
               android:text="10+10"
28
               android:textColor="@color/white"
               android:textSize="40sp"
29
               tools:ignore="HardcodedText" />
30
           <TextView
31
32
33
               android:id="@+id/output"
               android:layout_width="match_parent"
34
               android:layout_height="0dp"
35
               android:layout weight="1"
36
37
               android:background="#1d1d1d"
               android:gravity="end|center"
38
39
               android:text="20"
40
               android:textColor="@color/white"
               android:textSize="40sp"
41
42
               tools:ignore="HardcodedText" />
43
44
       </LinearLayout>
```

```
45
       <LinearLayout</pre>
46
           android:id="@+id/linearLayout"
           android:layout_width="match_parent"
47
           android:layout height="0dp"
48
           android:orientation="vertical"
49
50
           app:layout_constraintBottom_toBottomOf="parent"
           app:layout_constraintEnd_toEndOf="parent"
51
52
           app:layout constraintStart toStartOf="parent">
53
           <LinearLayout</pre>
               android:layout_width="match_parent"
54
               android:layout height="wrap content"
55
56
               android:orientation="horizontal">
57
           <Button
               android:id="@+id/addorsub"
58
               android:layout width="0dp"
59
               android:layout_height="80dp"
60
               android:layout_weight="1"
61
               android:text="+/-"
62
               android:background="@drawable/
63
   ripple effect numbers"
64
               android:textColor="@color/white"
65
               android:textSize="30sp"
66
               tools:ignore="HardcodedText" />
67
           <Button
               android:id="@+id/brackets"
68
               android:layout_width="0dp"
69
               android:layout_height="80dp"
70
               android:layout weight="1"
71
               android:text="()"
72
73
               android:background="@drawable/
   ripple effect numbers"
74
               android:textColor="@color/white"
               android:textSize="30sp"
75
               tools:ignore="HardcodedText" />
76
77
78
           <Button
79
               android:id="@+id/percentage"
               android:layout width="0dp"
80
               android:layout_height="80dp"
81
               android:layout_weight="1"
82
               android:text="%"
83
84
               android:background="@drawable/
   ripple effect numbers"
               android:textColor="@color/white"
85
               android:textSize="30sp"
86
               tools:ignore="HardcodedText" />
87
```

```
88
            <Button
 89
                android:id="@+id/division"
                android:layout width="0dp"
 90
                android:layout_height="80dp"
 91
                android:layout weight="1"
 92
 93
                android:background="@drawable/
    ripple_effect_operations"
 94
                android:text="/"
 95
                android:textColor="@color/white"
                android:textSize="30sp"
 96
                tools:ignore="HardcodedText,MissingConstraints
 97
            </LinearLayout>
 98
            <LinearLayout</pre>
 99
                android:layout width="match parent"
100
                android:layout_height="wrap_content"
101
                android:orientation="horizontal">
102
103
                <Button
                     android:id="@+id/number7"
104
                     android:layout width="0dp"
105
                     android:layout height="80dp"
106
107
                     android:layout weight="1"
                     android:text="7"
108
                     android:background="@drawable/
109
    ripple_effect_numbers"
110
                     android:textColor="@color/white"
                     android:textSize="30sp"
111
112
                     tools:ignore="HardcodedText" />
113
                <Button
114
                     android:id="@+id/number8"
                     android:layout width="0dp"
115
                     android:layout_height="80dp"
116
                     android:layout weight="1"
117
                     android:text="8"
118
119
                     android:background="@drawable/
    ripple effect numbers"
120
                     android:textColor="@color/white"
121
                     android:textSize="30sp"
122
                     tools:ignore="HardcodedText" />
123
124
                <Button
125
                     android:id="@+id/number9"
                     android:layout width="0dp"
126
                     android:layout_height="80dp"
127
                     android:layout_weight="1"
128
                     android:text="9"
129
```

```
android:background="@drawable/
130
    ripple effect numbers"
131
                     android:textColor="@color/white"
132
                     android:textSize="30sp"
133
                     tools:ignore="HardcodedText" />
134
                <Button
135
                     android:id="@+id/multiplilication"
136
                     android:layout width="0dp"
                     android:layout_height="80dp"
137
                     android:layout weight="1"
138
                     android:background="@drawable/
139
    ripple_effect_operations"
                     android:text="x"
140
141
                     android:textColor="@color/white"
                     android:textSize="30sp"
142
                     tools:ignore="HardcodedText,
143
    MissingConstraints" />
            </LinearLayout>
144
            <LinearLayout</pre>
145
                android:layout width="match parent"
146
                android:layout height="wrap content"
147
                android:orientation="horizontal">
148
149
                <Button
                     android:id="@+id/number4"
150
151
                     android:layout width="0dp"
                     android:layout_height="80dp"
152
                     android:layout_weight="1"
153
                     android:text="4"
154
                     android:background="@drawable/
155
    ripple effect numbers"
156
                     android:textColor="@color/white"
157
                     android:textSize="30sp"
                     tools:ignore="HardcodedText" />
158
159
                <Button
160
                     android:id="@+id/number5"
                     android:layout width="0dp"
161
162
                     android:layout_height="80dp"
                     android:layout_weight="1"
163
                     android:text="5"
164
                     android:background="@drawable/
165
    ripple effect numbers"
166
                     android:textColor="@color/white"
                     android:textSize="30sp"
167
                     tools:ignore="HardcodedText" />
168
169
170
                <Button
```

```
android:id="@+id/number6"
171
172
                     android:layout width="0dp"
                     android:layout_height="80dp"
173
                     android:layout weight="1"
174
                     android:text="6"
175
176
                     android:background="@drawable/
    ripple_effect_numbers"
177
                     android:textColor="@color/white"
                     android:textSize="30sp"
178
179
                     tools:ignore="HardcodedText" />
180
                <Button
                     android:id="@+id/subtraction"
181
                     android:layout width="0dp"
182
                     android:layout_height="80dp"
183
                     android:layout weight="1"
184
                     android:background="@drawable/
185
    ripple_effect_operations"
                     android:text="-"
186
                     android:textColor="@color/white"
187
                     android:textSize="30sp"
188
189
                    tools:ignore="HardcodedText,
    MissingConstraints" />
190
            </LinearLayout>
            <LinearLayout</pre>
191
192
                android:layout width="match parent"
                android:layout_height="wrap_content"
193
                android:orientation="horizontal">
194
195
                <Button
                     android:id="@+id/number1"
196
197
                     android:layout width="0dp"
                     android:layout_height="80dp"
198
                     android:layout_weight="1"
199
200
                     android:text="1"
                     android:background="@drawable/
201
    ripple_effect_numbers"
                     android:textColor="@color/white"
202
203
                     android:textSize="30sp"
204
                     tools:ignore="HardcodedText" />
205
                <Button
                     android:id="@+id/number2"
206
207
                     android:layout width="0dp"
                     android:layout_height="80dp"
208
                     android:layout_weight="1"
209
                     android:text="2"
210
                     android:background="@drawable/
211
    ripple effect numbers"
```

```
android:textColor="@color/white"
212
213
                     android:textSize="30sp"
                     tools:ignore="HardcodedText" />
214
215
216
                <Button
217
                     android:id="@+id/number3"
218
                     android:layout_width="0dp"
                     android:layout height="80dp"
219
                     android:layout_weight="1"
220
                     android:text="3"
221
222
                     android:background="@drawable/
    ripple_effect_numbers"
                     android:textColor="@color/white"
223
224
                     android:textSize="30sp"
                     tools:ignore="HardcodedText" />
225
226
                <Button
                     android:id="@+id/addition"
227
                     android:layout width="0dp"
228
                     android:layout height="80dp"
229
                     android:layout weight="1"
230
                     android:background="@drawable/
231
    ripple effect operations"
232
                     android:text="+"
233
                     android:textColor="@color/white"
234
                     android:textSize="30sp"
                     tools:ignore="HardcodedText,
235
    MissingConstraints" />
236
            </LinearLayout>
237
            <LinearLayout</pre>
238
                android:layout width="match parent"
                android:layout height="wrap content"
239
                android:orientation="horizontal">
240
241
                <Button
                     android:id="@+id/clear"
242
                     android:layout width="0dp"
243
                     android:layout height="80dp"
244
                     android:layout_weight="1"
245
                     android:text="C"
246
247
                     android:background="@drawable/
    ripple_effect_numbers"
248
                     android:textColor="@color/white"
                     android:textSize="30sp"
249
                     tools:ignore="HardcodedText" />
250
251
                <Button
                     android:id="@+id/number0"
252
                     android:layout_width="0dp"
253
```

```
android:layout height="80dp"
254
255
                     android:layout weight="1"
                     android:text="0"
256
257
                     android:background="@drawable/
    ripple effect numbers"
258
                     android:textColor="@color/white"
259
                     android:textSize="30sp"
                     tools:ignore="HardcodedText" />
260
261
262
                <Button
263
                     android:id="@+id/dot"
264
                     android:layout width="0dp"
                     android:layout_height="80dp"
265
                     android:layout_weight="1"
266
                     android:text="."
267
                     android:background="@drawable/
268
    ripple_effect_numbers"
269
                     android:textColor="@color/white"
                     android:textSize="30sp"
270
                     tools:ignore="HardcodedText" />
271
272
                <Button
273
                     android:id="@+id/equal"
274
                     android:layout width="0dp"
275
                     android:layout height="80dp"
276
                     android:layout weight="1"
                     android:background="@drawable/red button"
277
                     android:text="="
278
279
                     android:textColor="@color/white"
                     android:textSize="30sp"
280
281
                     tools:ignore="HardcodedText,
    MissingConstraints" />
282
            </LinearLayout>
283
284
285
286
287
288
289
290
291
292
293
294
295
        </LinearLayout>
296 </androidx.constraintlayout.widget.ConstraintLayout>
```