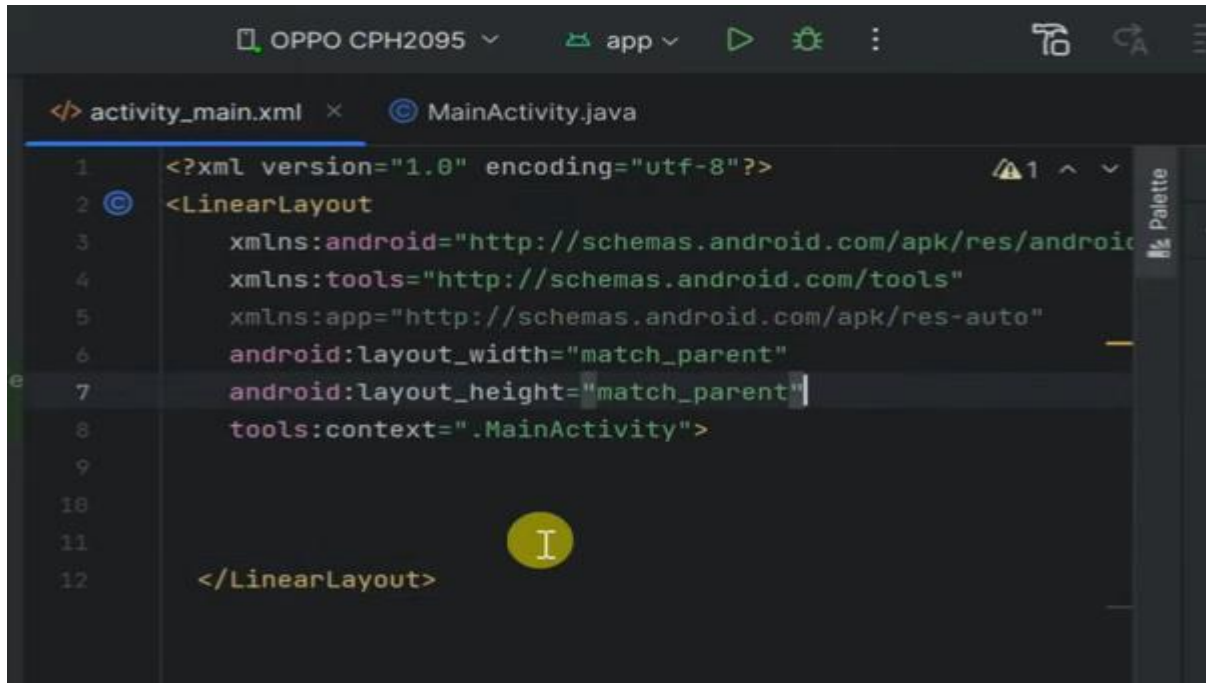


## Practical no. 7- Programs related to different layouts: Linear, Relative, Table layout and List view.

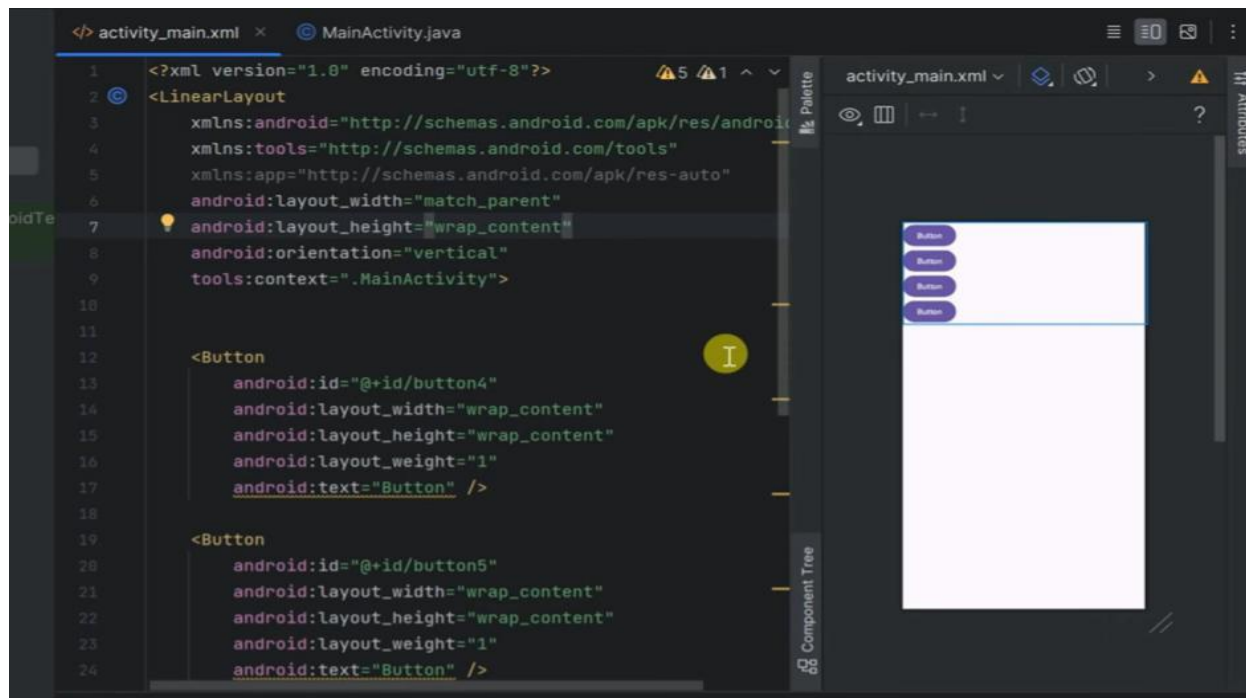
### Linear layout :



The screenshot shows an IDE with the file 'activity\_main.xml' open. The XML code defines a `LinearLayout` with the following attributes:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

</LinearLayout>
```



The screenshot shows the same IDE with the 'activity\_main.xml' file updated to include two `Button` elements. The XML code is as follows:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="vertical"
    tools:context=".MainActivity">

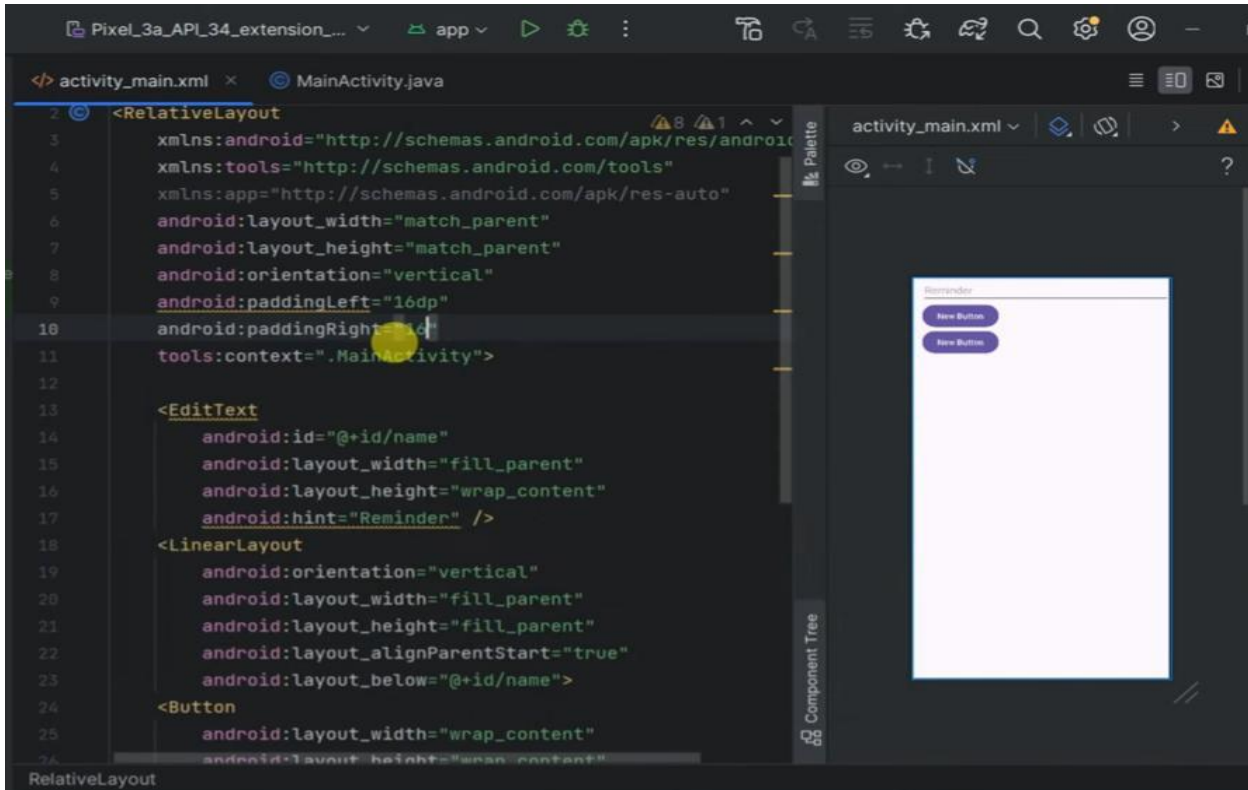
    <Button
        android:id="@+id/button4"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:text="Button" />

    <Button
        android:id="@+id/button5"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:text="Button" />

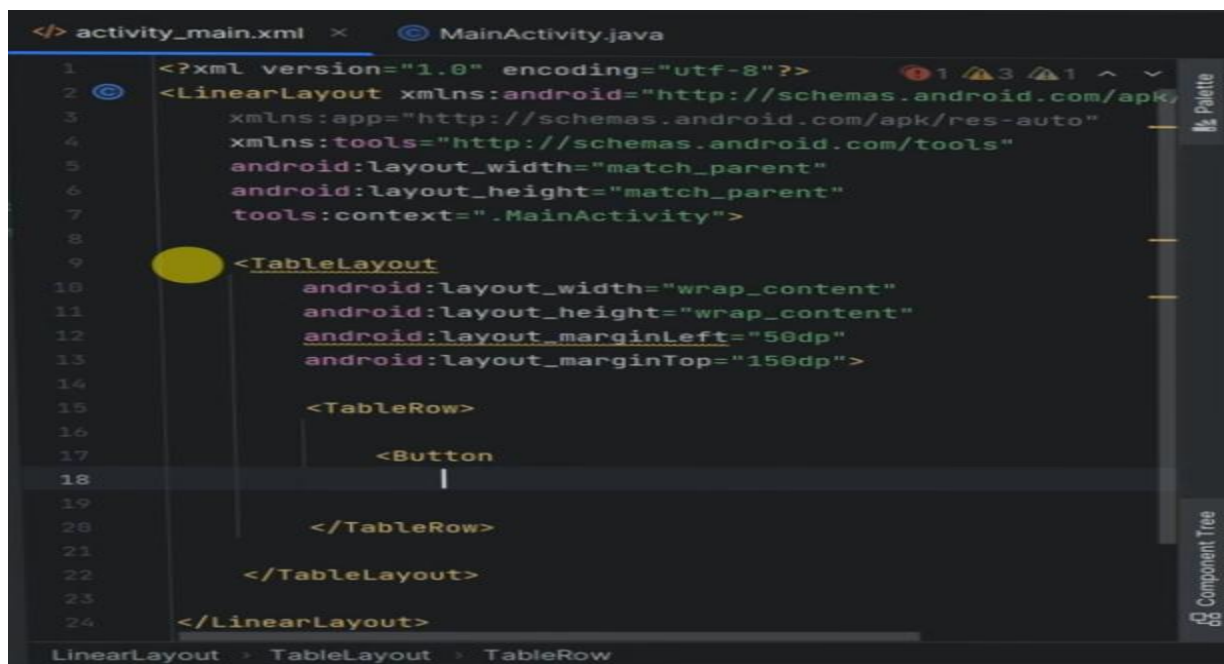
</LinearLayout>
```

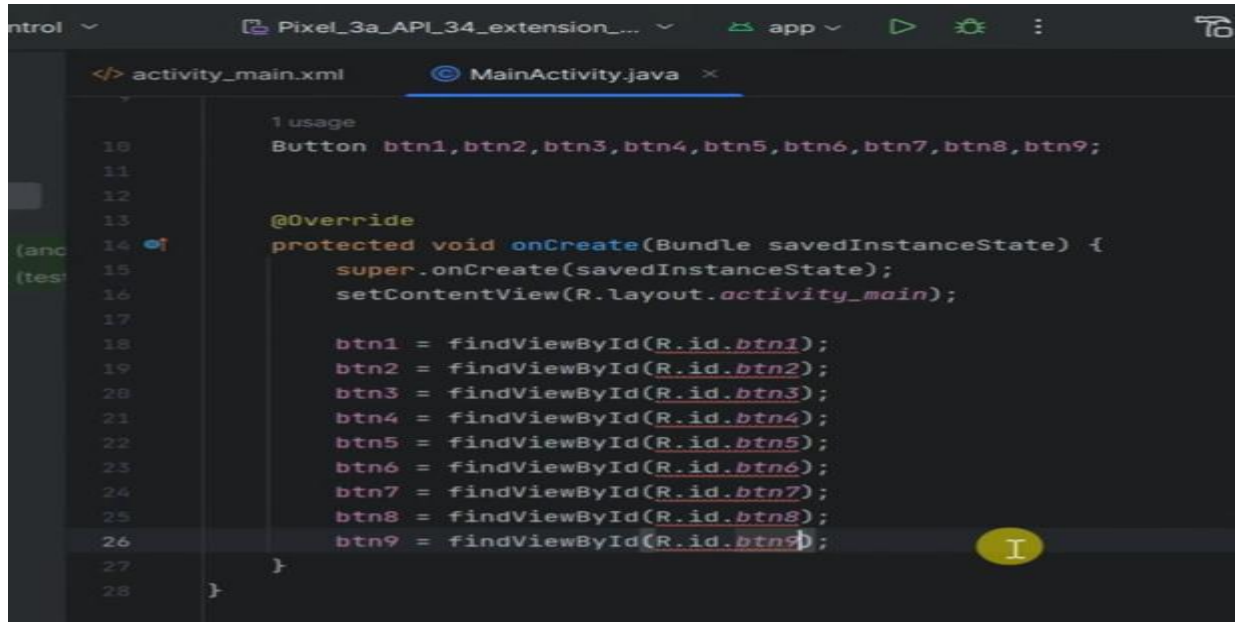
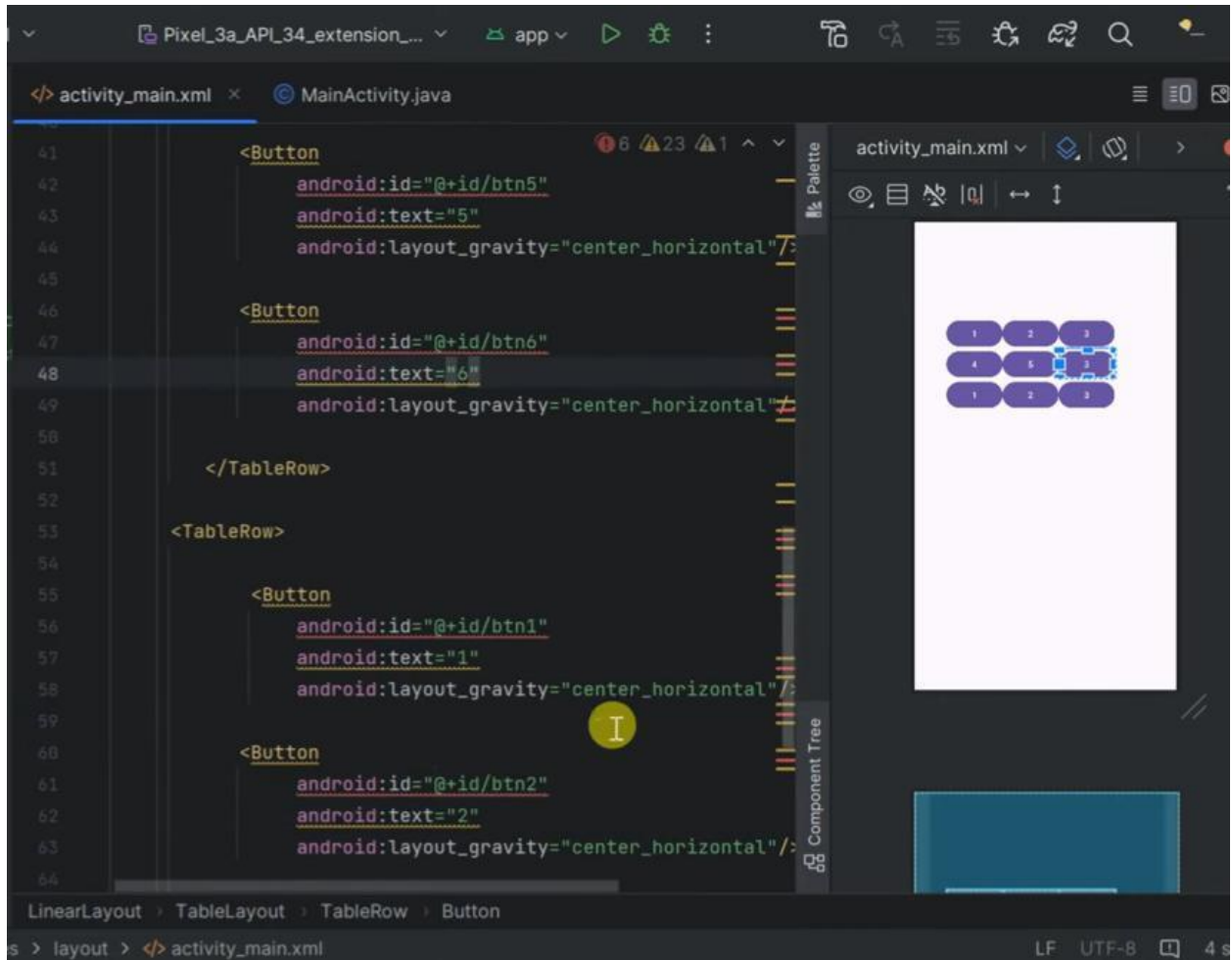
On the right side of the IDE, there is a visual preview of the layout. It shows a vertical stack of two buttons, each labeled 'Button', within a container. The 'Component Tree' panel on the right also displays the hierarchy of the UI components.

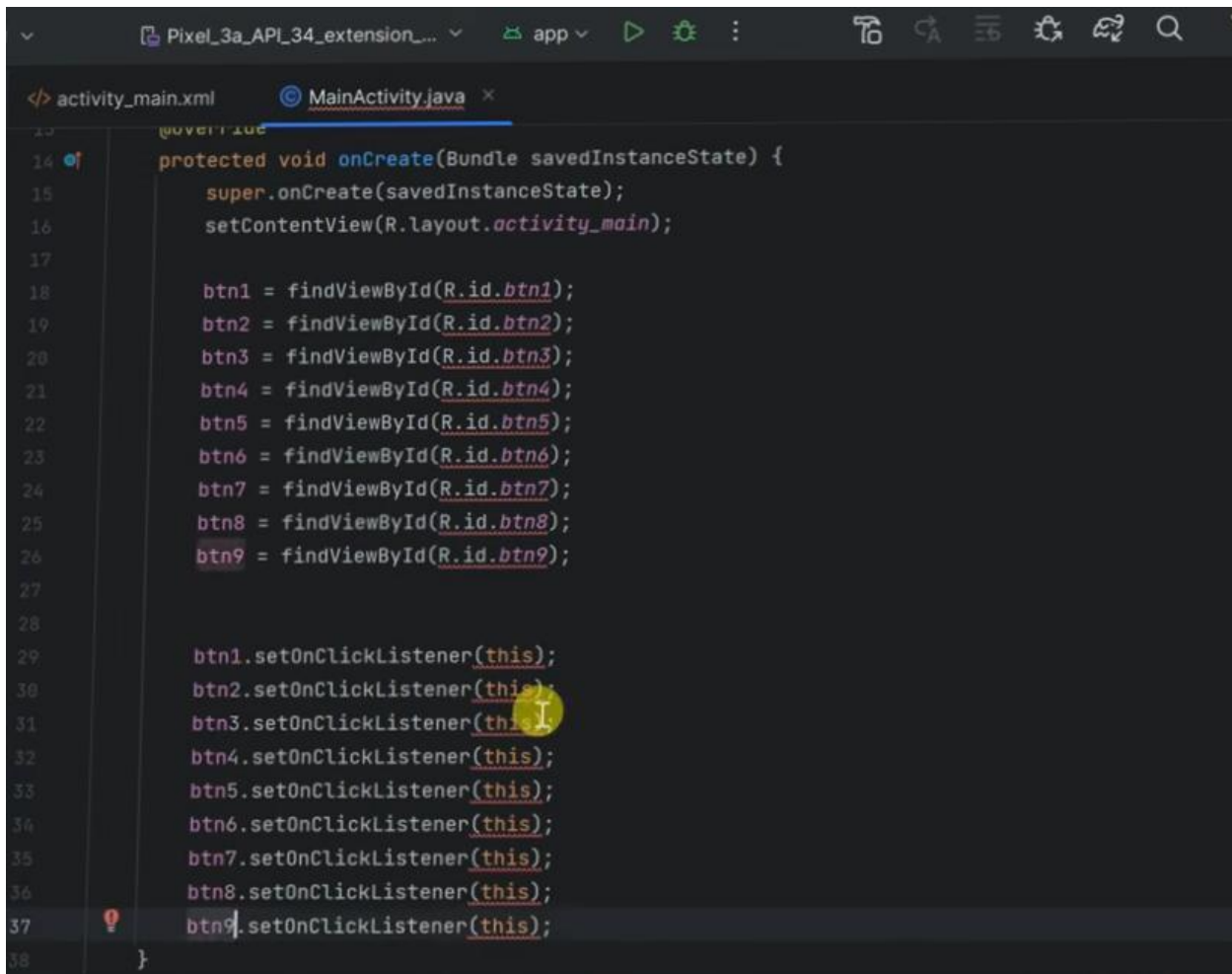
## Relative Layout:



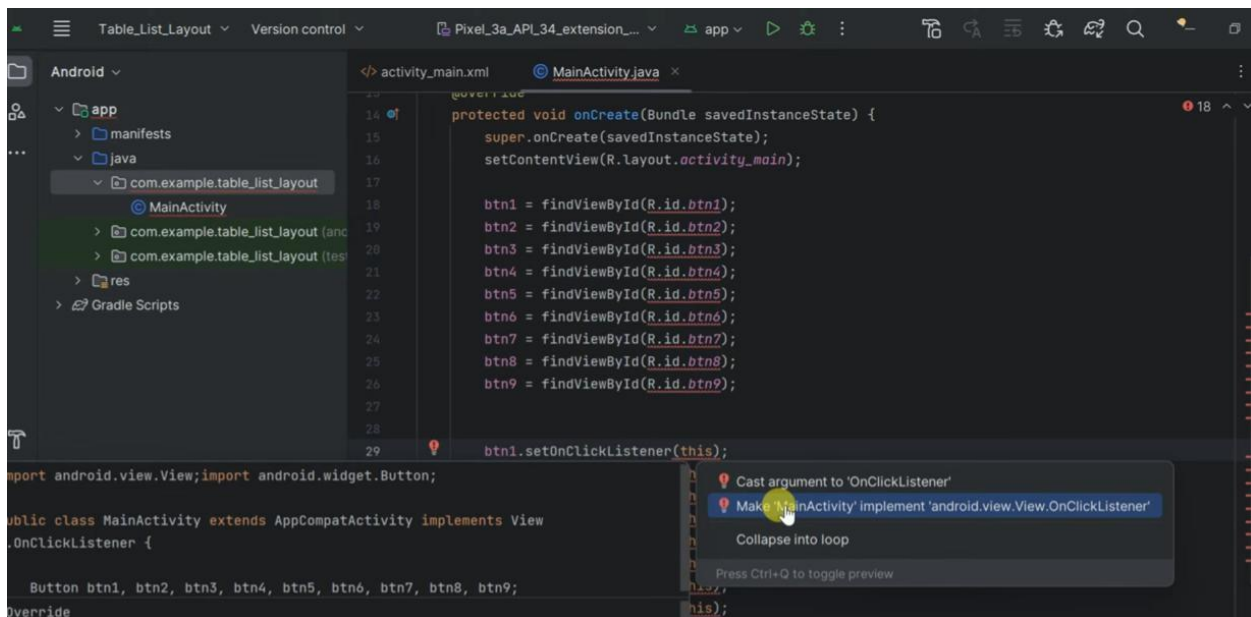
## Table layout:







```
13  @Override
14  protected void onCreate(Bundle savedInstanceState) {
15      super.onCreate(savedInstanceState);
16      setContentView(R.layout.activity_main);
17
18      btn1 = findViewById(R.id.btn1);
19      btn2 = findViewById(R.id.btn2);
20      btn3 = findViewById(R.id.btn3);
21      btn4 = findViewById(R.id.btn4);
22      btn5 = findViewById(R.id.btn5);
23      btn6 = findViewById(R.id.btn6);
24      btn7 = findViewById(R.id.btn7);
25      btn8 = findViewById(R.id.btn8);
26      btn9 = findViewById(R.id.btn9);
27
28
29      btn1.setOnClickListener(this);
30      btn2.setOnClickListener(this);
31      btn3.setOnClickListener(this);
32      btn4.setOnClickListener(this);
33      btn5.setOnClickListener(this);
34      btn6.setOnClickListener(this);
35      btn7.setOnClickListener(this);
36      btn8.setOnClickListener(this);
37      btn9.setOnClickListener(this);
38  }
```



```
14  protected void onCreate(Bundle savedInstanceState) {
15      super.onCreate(savedInstanceState);
16      setContentView(R.layout.activity_main);
17
18      btn1 = findViewById(R.id.btn1);
19      btn2 = findViewById(R.id.btn2);
20      btn3 = findViewById(R.id.btn3);
21      btn4 = findViewById(R.id.btn4);
22      btn5 = findViewById(R.id.btn5);
23      btn6 = findViewById(R.id.btn6);
24      btn7 = findViewById(R.id.btn7);
25      btn8 = findViewById(R.id.btn8);
26      btn9 = findViewById(R.id.btn9);
27
28
29      btn1.setOnClickListener(this);
```

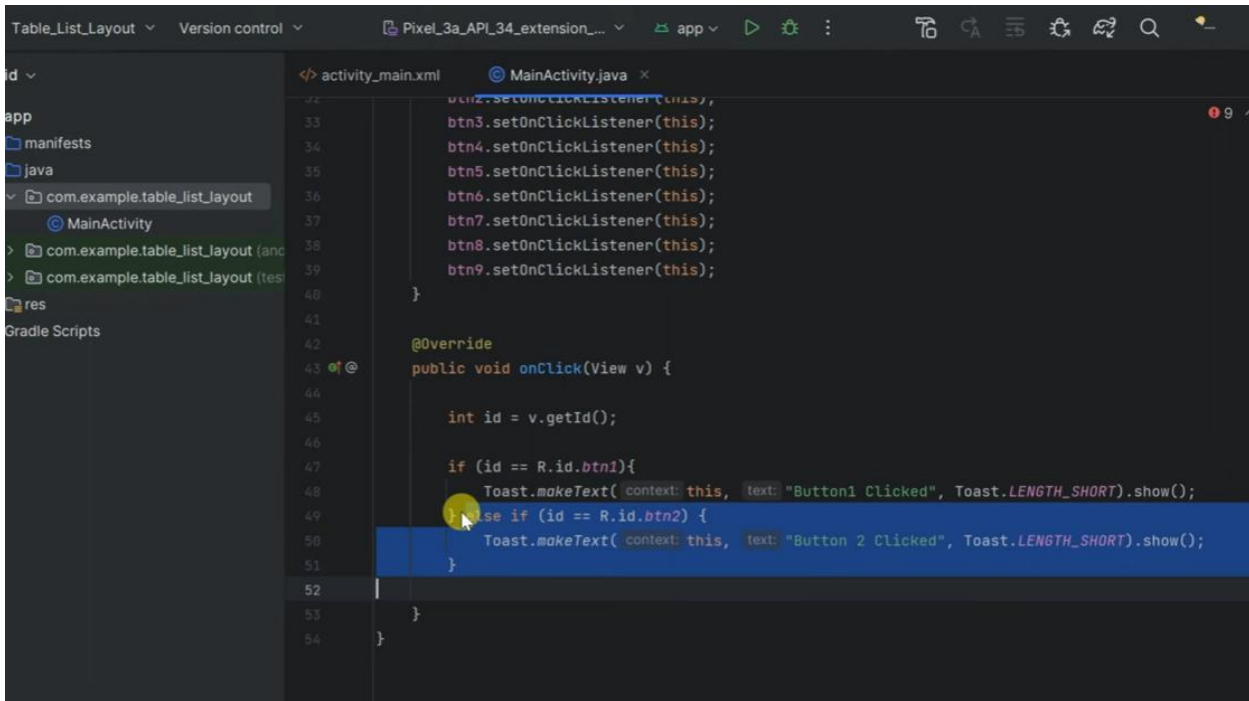
import android.view.View; import android.widget.Button;

public class MainActivity extends AppCompatActivity implements View.OnClickListener {

Button btn1, btn2, btn3, btn4, btn5, btn6, btn7, btn8, btn9;

Override

- Cast argument to 'OnClickListener'
- Make 'MainActivity' implement 'android.view.View.OnClickListener'**
- Collapse into loop
- Press Ctrl+Q to toggle preview



**List view :**

