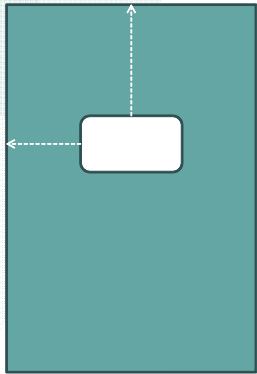


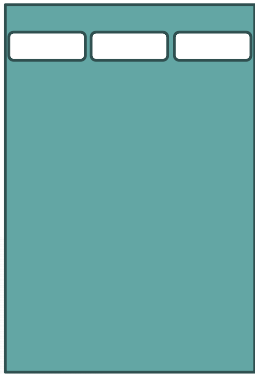


Layout

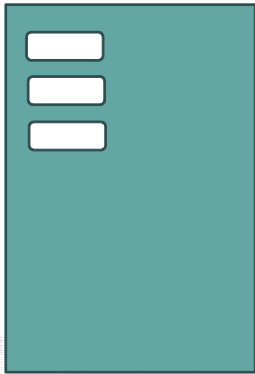
Layout 종류-①



제약 레이아웃(ConstraintLayout)

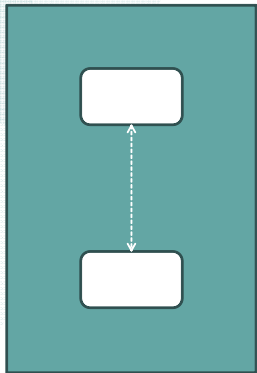


리니어 레이아웃(LinearLayout)
horizontal

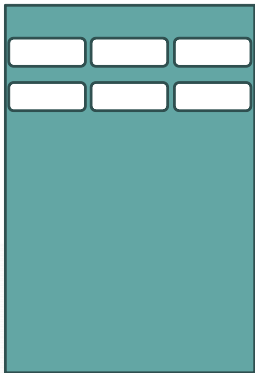


리니어 레이아웃(LinearLayout)
vertical

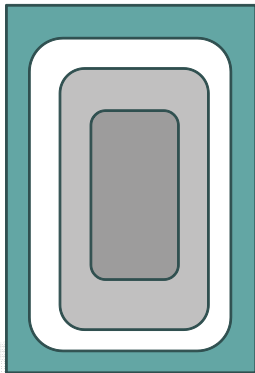
Layout 종류-②



상대 레이아웃(RelativeLayout)



테이블 레이아웃(TableLayout)



프레임 레이아웃(FrameLayout)

Empty Activity

Creates a new empty activity

본인의
Gs학번이니셜

Name

Gs20XXhgd

Package name

org.techtown.gs20xxhgd

Save location

C:\Gs20XXhgd

Language

Java

Minimum SDK

API 21: Android 5.0 (Lollipop)

 Your app will run on approximately 94.1% of devices.[Help me choose](#)☐ Use legacy android.support libraries 

Using legacy android.support libraries will prevent you from using the latest Play Services and Jetpack libraries

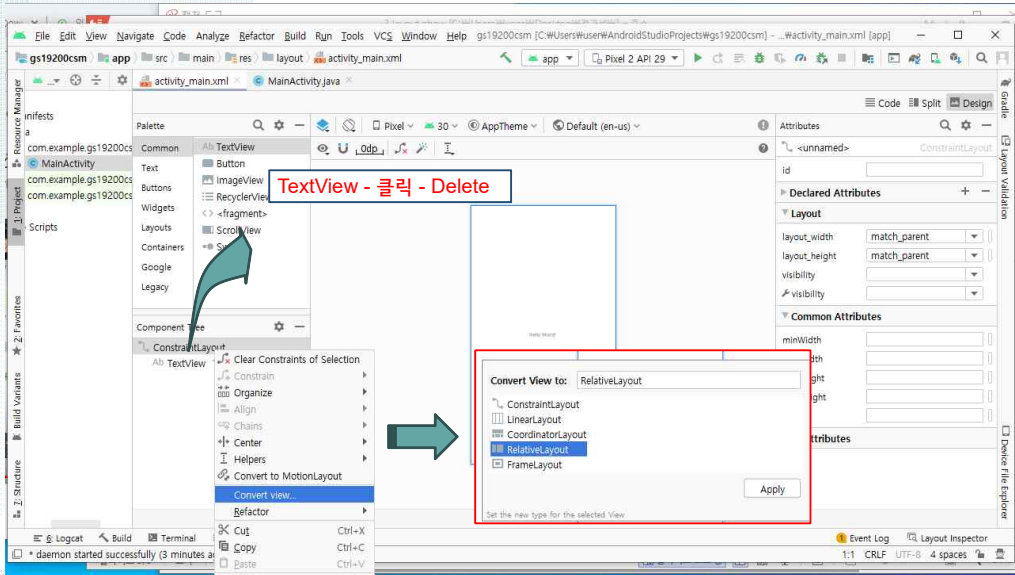
 The path 'C:\W' is not writable. Please choose a new location.

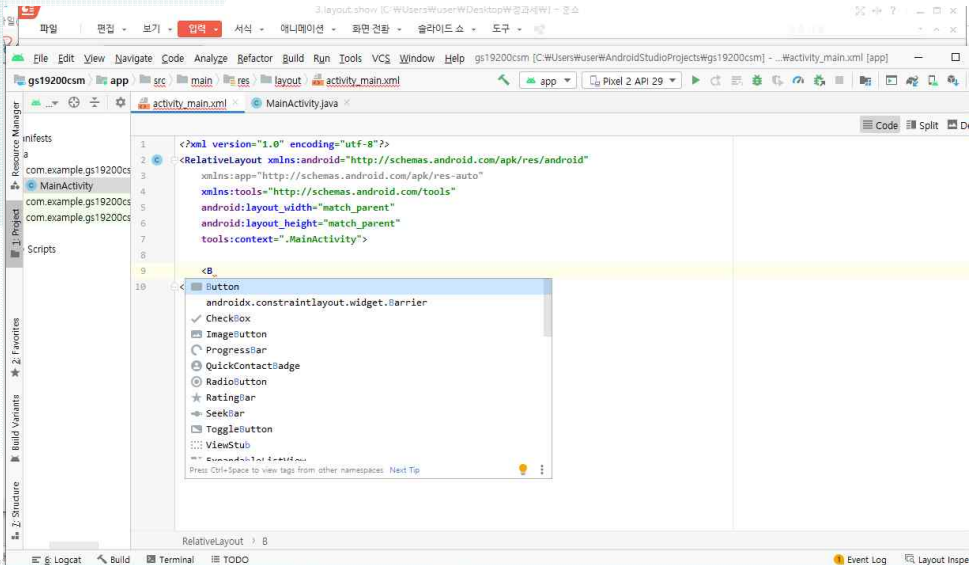
Previous

Next

Cancel

Finish





Android Studio interface showing the XML editor for `activity_main.xml` and the Java editor for `MainActivity.java`.

The XML editor on the left shows the following code:

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

    <Button
        android:layout_width="100dp"
        android:layout_height="100dp"
        an
    </RelativeLayout>
```

A blue box highlights the text "선택 - [Enter]" (Select - [Enter]) next to the `an` tag, indicating the action to be performed.

The Java editor on the right shows the following code:

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

    <Button
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:layout_alignParentTop="
    </RelativeLayout>
```

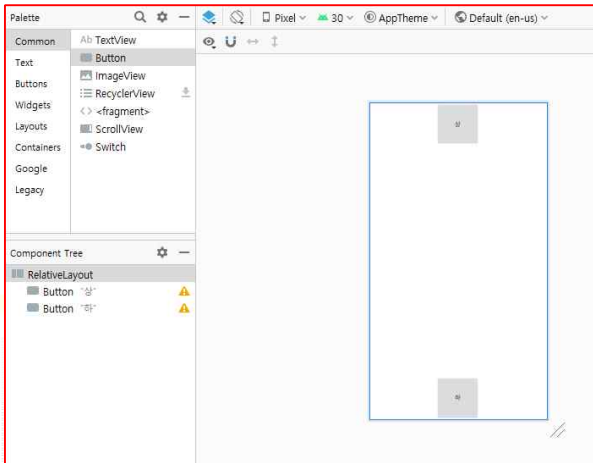
A red box highlights the Java editor, and a green arrow points from the XML editor to the Java editor, indicating the transformation of the XML code into Java code.

The bottom of the screen shows the Logcat, Build, Terminal, and TODO tabs, along with the Event Log and Layout Inspector.

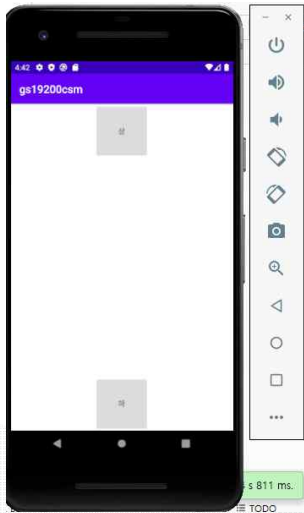

```

1 <?xml version="1.0" encoding="utf-8"?>
2 <RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
3     xmlns:app="http://schemas.android.com/apk/res-auto"
4     xmlns:tools="http://schemas.android.com/tools"
5     android:layout_width="match_parent"
6     android:layout_height="match_parent"
7     tools:context=".MainActivity">
8
9     <Button
10         android:layout_width="100dp"
11         android:layout_height="100dp"
12         android:layout_alignParentTop="true"
13         android:layout_centerHorizontal="true"
14         android:text="상"
15     />
16
17     <Button
18         android:layout_width="100dp"
19         android:layout_height="100dp"
20         android:layout_alignParentBottom="true"
21         android:layout_centerHorizontal="true"
22         android:text="하"
23     />
24
25 </RelativeLayout>

```



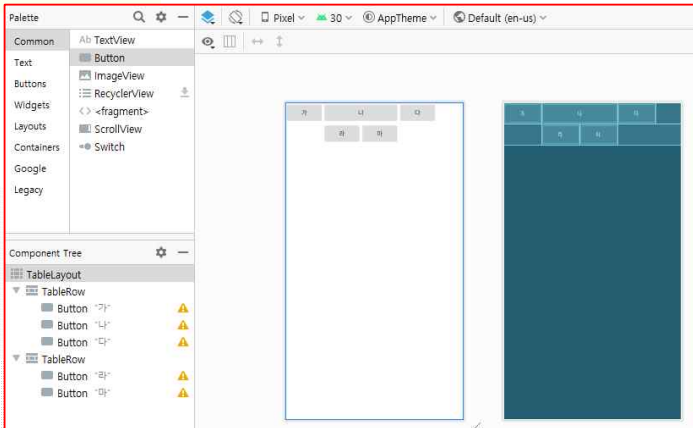
에뮬레이터 캡처 그림파일저장은 20XXX아무개실습3



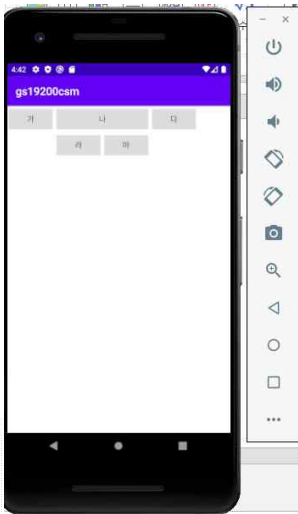
```

1 <?xml version="1.0" encoding="utf-8"?>
2 <TableLayout xmlns:android="http://schemas.android.com/apk/res/android"
3     xmlns:app="http://schemas.android.com/apk/res-auto"
4     xmlns:tools="http://schemas.android.com/tools"
5     android:layout_width="match_parent"
6     android:layout_height="match_parent"
7     tools:context=".MainActivity">
8
9     <TableRow>
10         <Button
11             android:text="가"
12             />
13         <Button
14             android:text="나"
15             android:layout_span="2"
16             />
17         <Button
18             android:text="다"
19             />
20     </TableRow>
21     <TableRow>
22         <Button
23             android:layout_column="1"
24             android:text="라"
25             />
26         <Button
27             android:text="마"
28             />
29     </TableRow>
30 </TableLayout>

```



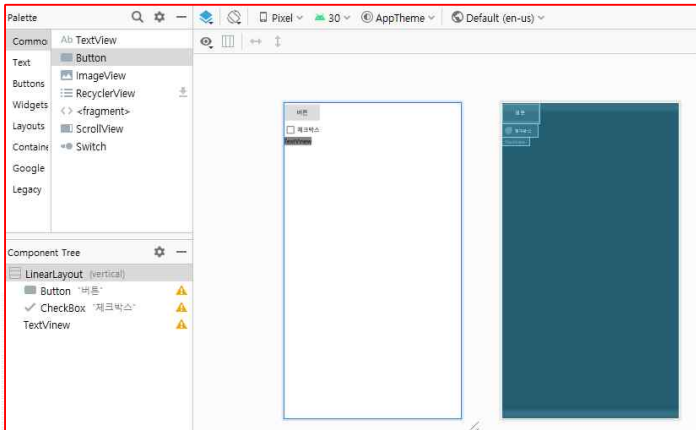
에뮬레이터 캡처 그림파일저장은 20XXX아무개실습4



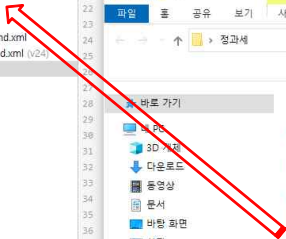
```

1  <?xml version="1.0" encoding="utf-8"?>
2  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      xmlns:app="http://schemas.android.com/apk/res-auto"
4      xmlns:tools="http://schemas.android.com/tools"
5      android:layout_width="match_parent"
6      android:layout_height="match_parent"
7      tools:context=".MainActivity"
8      android:orientation="vertical">
9
10     <Button
11         android:layout_width="wrap_content"
12         android:layout_height="wrap_content"
13         android:text="버튼"/>
14
15     <CheckBox
16         android:layout_width="wrap_content"
17         android:layout_height="wrap_content"
18         android:text="체크박스"/>
19
20     <TextView
21         android:layout_width="wrap_content"
22         android:layout_height="wrap_content"
23         android:text="텍스트"/>
24
25 </LinearLayout>

```



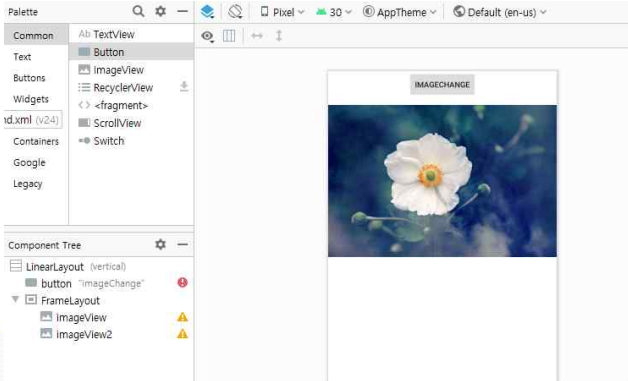
다운받은 first, second 그림을 app/res/drawable 로 드레그



```

1 <?xml version="1.0" encoding="utf-8"?>
2 <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3     xmlns:app="http://schemas.android.com/apk/res-auto"
4     xmlns:tools="http://schemas.android.com/tools"
5     android:layout_width="match_parent"
6     android:layout_height="match_parent"
7     tools:context=".MainActivity"
8     android:orientation="vertical">
9
10     <Button
11         android:layout_width="wrap_content"
12         android:layout_height="wrap_content"
13         android:id="@+id/button"
14         android:text="imageChange"
15         android:layout_gravity="center"
16         android:onClick="onButtonClicked"/>
17
18     <FrameLayout
19         android:layout_width="match_parent"
20         android:layout_height="match_parent">
21         <ImageView
22             android:layout_width="wrap_content"
23             android:layout_height="wrap_content"
24             android:id="@+id/imageView"
25             android:visibility="invisible"
26             app:srcCompat="@drawable/first"/>
27         <ImageView
28             android:layout_width="wrap_content"
29             android:layout_height="wrap_content"
30             android:id="@+id/imageView2"
31             android:visibility="visible"
32             app:srcCompat="@drawable/second"/>
33     </FrameLayout>
34 </LinearLayout>
35

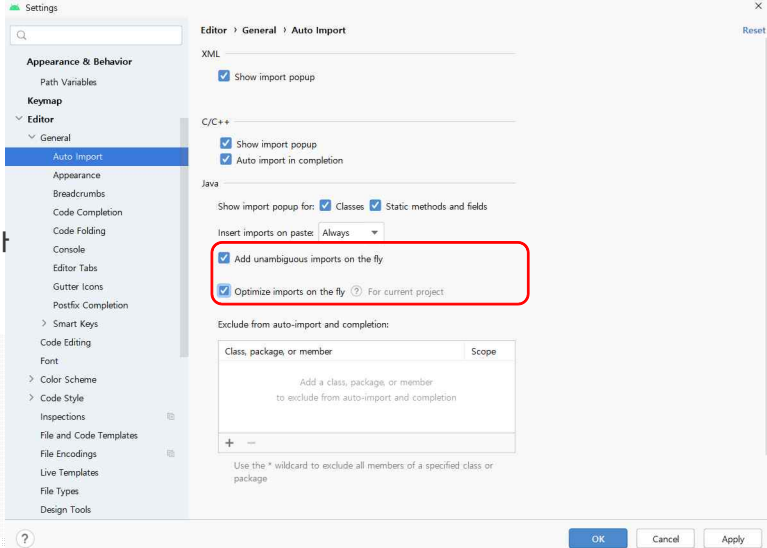
```



▶ 자바에서는 어떤
클래스를 사용할 때
import 구문을 추가

안드로이드에서는 코드가
입력될 때 필요한 import
구문을 자동으로 넣을 수
있는 기능 제공

[file -> settings]




```
activity_main.xml x MainActivity.java x
1 package com.example.gs19200csm;
2
3 import ...
4
5
6
7
8
9 public class MainActivity extends AppCompatActivity {
10     ImageView imageView;
11     ImageView imageView2;
12
13     int imageIndex = 0;
14
15     @Override
16     protected void onCreate(Bundle savedInstanceState) {
17         super.onCreate(savedInstanceState);
18         setContentView(R.layout.activity_main);
19
20         imageView = findViewById(R.id.imageView);
21         imageView2 = findViewById(R.id.imageView2);
22     }
23
24     public void onClicked(View v) {
25         changeImage();
26     }
27     private void changeImage(){
28         if (imageIndex == 0) {
29             imageView.setVisibility(View.VISIBLE);
30             imageView2.setVisibility(View.INVISIBLE);
31
32             imageIndex = 1;
```

이어서

```
33         } else if (imageIndex == 1) {
34             imageView.setVisibility(View.INVISIBLE);
35             imageView2.setVisibility(View.VISIBLE);
36
37             imageIndex = 0;
38         }
39     }
40 }
```

에뮬레이터 캡처(둘중하나)
그림파일저장은
20XXX아무개실습5

