



리스트뷰와 갤러리

1. 그리드뷰

[실습] 영화 포스터 보기 1

- ❖ 그리드뷰를 이용해서 여러 사진(영화 포스터)을 격자 모양으로 배치하자. 영화포스터를 클릭하면 확대된 포스터가 대화상자로 나온다.

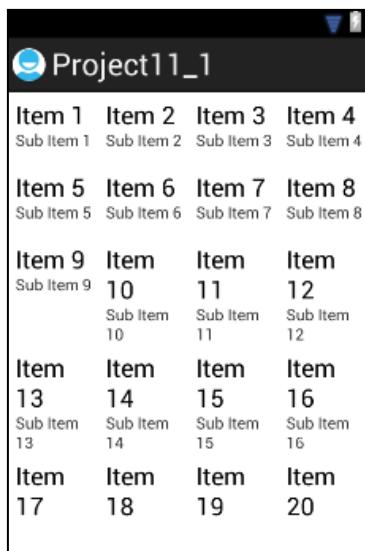
프로젝트 정보

- ✓ Application Name: GridView01
- ✓ Minimum SDK : API 16
- ✓ Add an activity to Mobile: Blank Activity
- ✓ Activity Name: MainActivity
- ✓ Layout Name: activity_main
- ✓ Title: MainActivity
- ✓ Menu Resource Name: menu_main

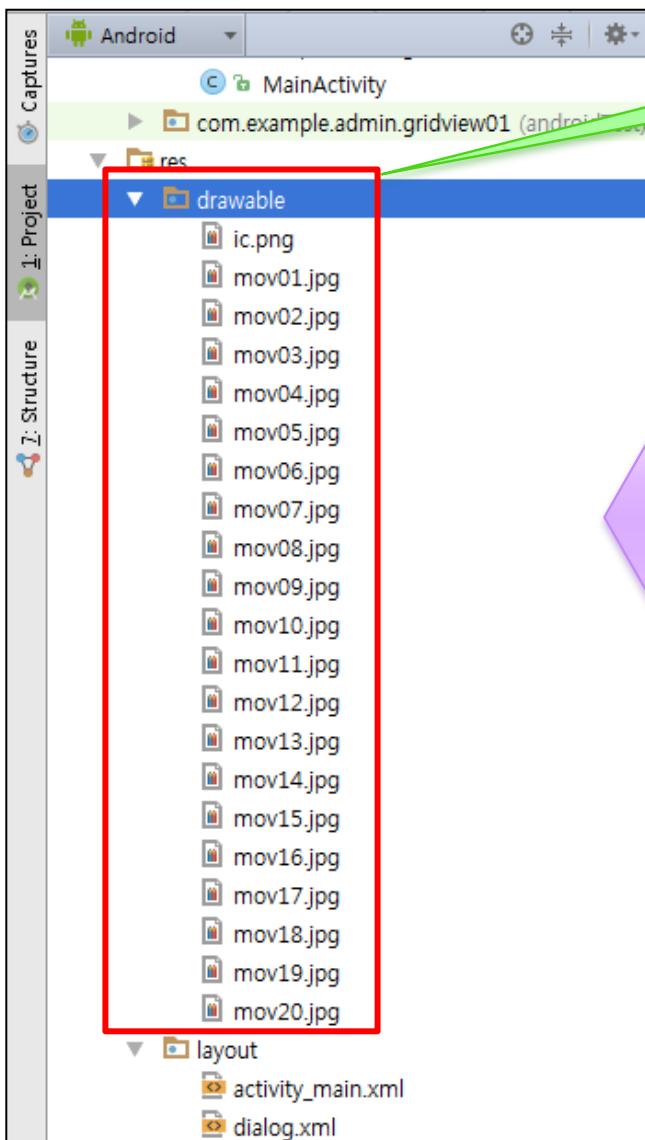


❖ 화면 디자인

- ✓ main.xml에 그리드뷰를 하나 추가
- ✓ 큰 포스트용 dialog.xml 추가
[res]→[layout] 폴더 오른쪽 마우스 클릭 후 [new]→[XML]→ [Layout XML File]클릭 하여 생성
- ✓ 영화 포스터로 사용할 이미지 10개(mov01~mov20)를 /res/drawable에 복사

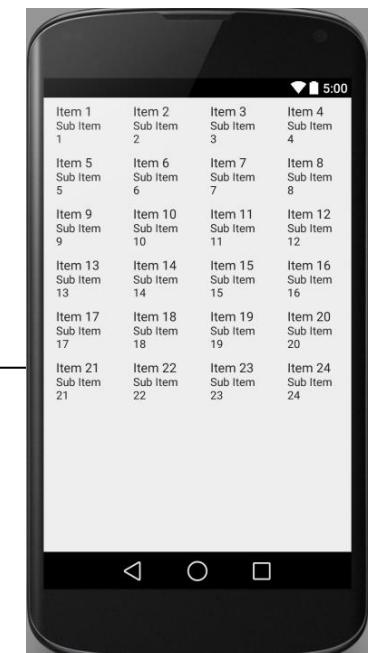


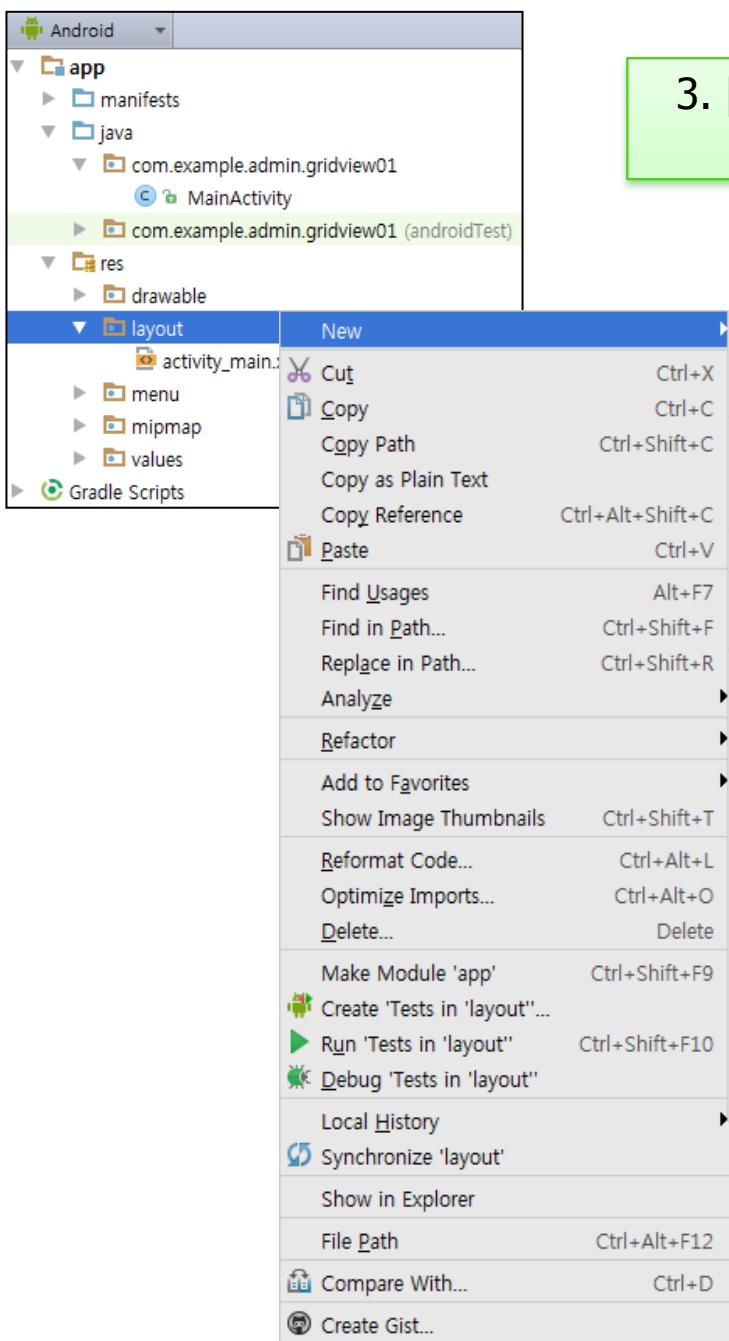
1. 이미지 파일을
“drawable”에 복사



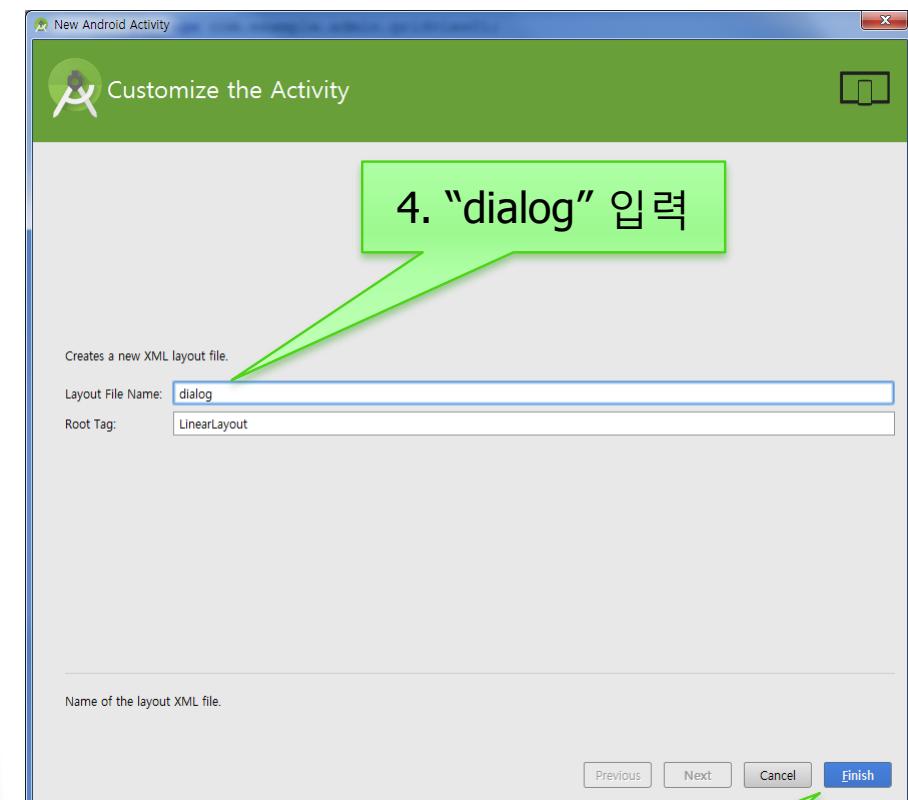
2. 코딩

```
activity_main.xml x  
c <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
    xmlns:tools="http://schemas.android.com/tools"  
    android:layout_width="match_parent"  
    android:layout_height="match_parent"  
    android:orientation="vertical"  
    tools:context=".MainActivity">  
  
    <GridView  
        android:id="@+id/gridView01"  
        android:layout_width="match_parent"  
        android:layout_height="wrap_content"  
        android:numColumns="4" />  
  
</LinearLayout>
```





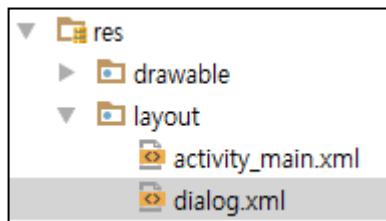
3. [layout]→[New]→[XML]→[Layout XML File] 클릭



4. "dialog" 입력



5. 클릭



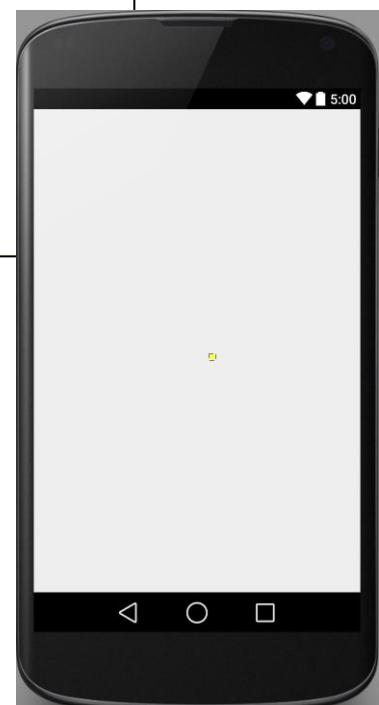
6. 코딩

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:gravity="center"
    android:orientation="vertical">

    <ImageView
        android:id="@+id/ivPoster"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content" />

</LinearLayout>
```

The screenshot shows the XML code for the 'dialog.xml' layout. It consists of a single 'LinearLayout' with 'match_parent' dimensions, 'center' gravity, and 'vertical' orientation. Inside, there is an 'ImageView' with 'wrap_content' dimensions and an ID of '@+id/ivPoster'.



```
>MainActivity.java ×
1 package com.example.admin.gridview01;
2
3 import ...
4
5
6
7 public class MainActivity extends AppCompatActivity {
8
9     @Override
10    protected void onCreate(Bundle savedInstanceState) {
11        super.onCreate(savedInstanceState);
12        setContentView(R.layout.activity_main);
13
14        setTitle("그리드뷰 영화 포스터");
15
16        final GridView gv = (GridView) findViewById(R.id.gridView01);
17        MyGridAdapter gAdapter = new MyGridAdapter(this);
18        gv.setAdapter(gAdapter);
19
20    }
21 }
```

어댑터 생성하여
그리드뷰에 적용

참고: MyGridAdapter 는 아직 구현되지
않아서 에러 표시됨

7. 코딩

MainActivity.java

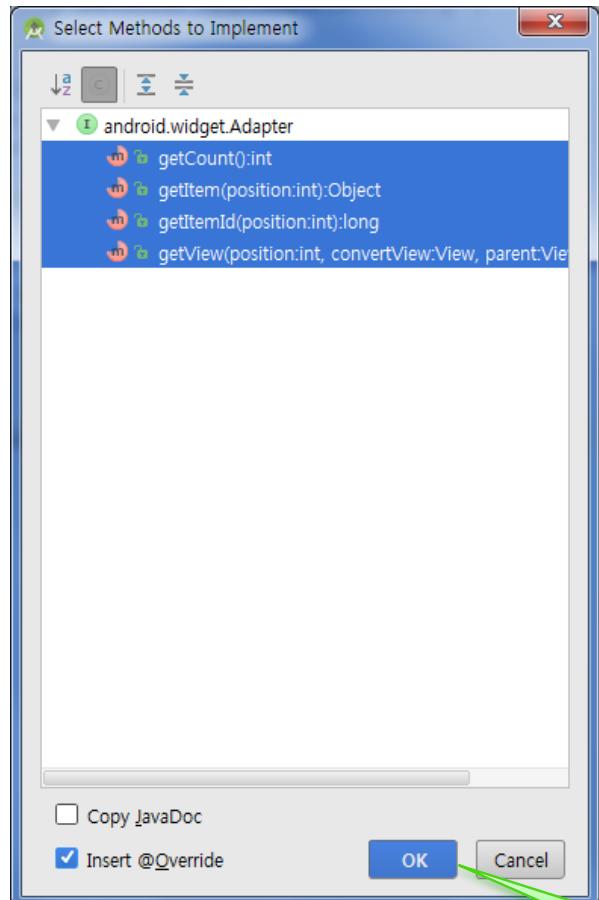
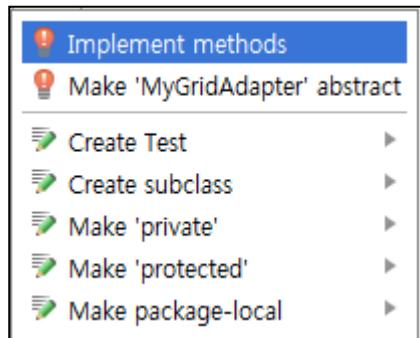
```
1 package com.example.admin.gridView01;  
2  
3 import ...  
4  
5 public class MainActivity extends AppCompatActivity {  
6  
7     @Override  
8     protected void onCreate(Bundle savedInstanceState) {  
9         super.onCreate(savedInstanceState);  
10        setContentView(R.layout.activity_main);  
11  
12        setTitle("그리드뷰 영화 포스터");  
13  
14        final GridView gv = (GridView) findViewById(R.id.gridView01);  
15        MyGridAdapter gAdapter = new MyGridAdapter(this);  
16        gv.setAdapter(gAdapter);  
17  
18    }  
19  
20}  
21  
22  
23 public class MyGridAdapter extends BaseAdapter{  
24  
25 }  
26  
27
```

9. 클릭

- ! Implement methods
- ! Make 'MyGridAdapter' abstract
- >Create Test
- Create subclass
- Make 'private'
- Make 'protected'
- Make package-local

10. 클릭

8. 코딩



```
25  public class MyGridAdapter extends BaseAdapter{
26
27
28  @Override
29  public int getCount() {
30      return 0;
31  }
32
33  @Override
34  public Object getItem(int position) {
35      return null;
36  }
37
38  @Override
39  public long getItemId(int position) {
40      return 0;
41  }
42
43  @Override
44  public View getView(int position, View convertView, ViewGroup parent) {
45      return null;
46  }
47 }
```

11. 클릭

12. 추가 확인

```
27  
28     public class MyGridAdapter extends BaseAdapter {  
29         Context context;  
30         public MyGridAdapter(Context c) {  
31             context = c;  
32         }  
33         @Override  
34         public int getCount() {  
35             return posterID.length;  
36         }  
37         @Override  
38         public Object getItem(int position) {  
39             return null;  
40         }  
41         @Override  
42         public long getItemId(int position) {  
43             return 0;  
44         }  
45         Integer[] posterID = {R.drawable.mov01, R.drawable.mov02,  
46                             R.drawable.mov03, R.drawable.mov04, R.drawable.mov05,  
47                             R.drawable.mov06, R.drawable.mov07, R.drawable.mov08,  
48                             R.drawable.mov09, R.drawable.mov10, R.drawable.mov11,  
49                             R.drawable.mov12, R.drawable.mov13, R.drawable.mov14,  
50                             R.drawable.mov15, R.drawable.mov16, R.drawable.mov17,  
51                             R.drawable.mov18, R.drawable.mov19, R.drawable.mov20};  
52         }  
53         }  
54         }  
55         }  
56         }  
57         }
```

12. 코딩

이미지 개수 리턴

13. 수정

14. 코딩

이미지id를 배열로 관리

15. 코딩

```
c MainActivity.java x
58
59     @Override
60     public View getView(int position, View convertView, ViewGroup parent) {
61         ImageView imageview = new ImageView(context);
62         imageview.setLayoutParams(new GridView.LayoutParams(100, 150));
63         imageview.setScaleType(ImageView.ScaleType.FIT_CENTER);
64         imageview.setPadding(5, 5, 5, 5);
65
66         imageview.setImageResource(posterID[position]);
67
68         final int pos = position;
69         imageview.setOnClickListener(new View.OnClickListener() {
70             @Override
71             public void onClick(View v) {
72
73                 View dialogView = (View) View.inflate(MainActivity.this,
74                     R.layout.dialog, null);
75                 AlertDialog.Builder dlg = new AlertDialog.Builder(
76                     MainActivity.this);
77                 ImageView ivPosster =
78                     (ImageView) dialogView.findViewById(R.id.ivPoster);
79                 ivPosster.setImageResource(posterID[pos]);
80                 dlg.setTitle("큰 포스터");
81                 dlg.setIcon(R.drawable.ic);
82                 dlg.setView(dialogView);
83                 dlg.setNegativeButton("닫기", null);
84                 dlg.show();
85             }
86         });
87         return imageview;
88     }
89 }
90 }
```

```

@Override
public View getView(int position, View convertView, ViewGroup parent) {
    ImageView imageview = new ImageView(context);
    imageview.setLayoutParams(new GridView.LayoutParams(100, 150));
    imageview.setScaleType(ImageView.ScaleType.FIT_CENTER);
    imageview.setPadding(5, 5, 5, 5);
    imageview.setImageResource(posterID[position]);
    final int pos = position;
    imageview.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            View dialogView = (View) View.inflate(MainActivity.this,
                R.layout.dialog, null);
            AlertDialog.Builder dlg = new AlertDialog.Builder(
                MainActivity.this);
            ImageView ivPosster =
                (ImageView)dialogView.findViewById(R.id.ivPoster);
            ivPosster.setImageResource(posterID[pos]);
            dlg.setTitle("큰 포스터");
            dlg.setIcon(R.drawable.ic);
            dlg.setView(dialogView);
            dlg.setNegativeButton("닫기", null);
            dlg.show();
        }
    });
    return imageview;
}

```

이미지뷰 변수 생성

이미지뷰 크기 지정

이미지뷰를 그리드 뷰 중앙에 배치

Padding 설정

이미지뷰에 영화 포스터 적용

다이얼로그뷰 생성

이미지뷰에 클릭한 포스터의 ID 설정

클릭



2. 갤러리

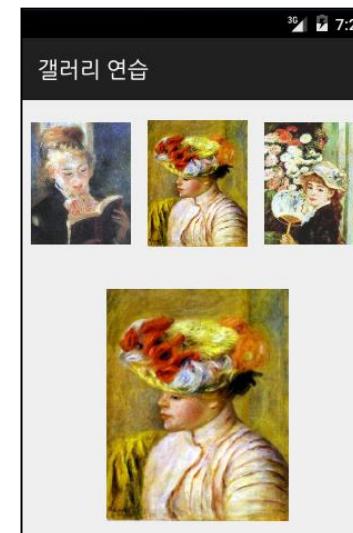


[실습11-2] 영화 포스터 보기 2

- ❖ 갤러리를 영화 포스터 보기 이용해서 작성한다.
- ❖ 영화 포스터를 클릭하면 아래쪽 이미지뷰에 확대된 영화 포스터가 나오게 한다.

프로젝트 정보

- ✓ Application Name: Gallerry01
- ✓ Minimum SDK : API 16
- ✓ Add an activity to Mobile: Blank Activity
- ✓ Activity Name: MainActivity
- ✓ Layout Name: activity_main
- ✓ Title: MainActivity
- ✓ Menu Resource Name: menu_main



1. 코딩

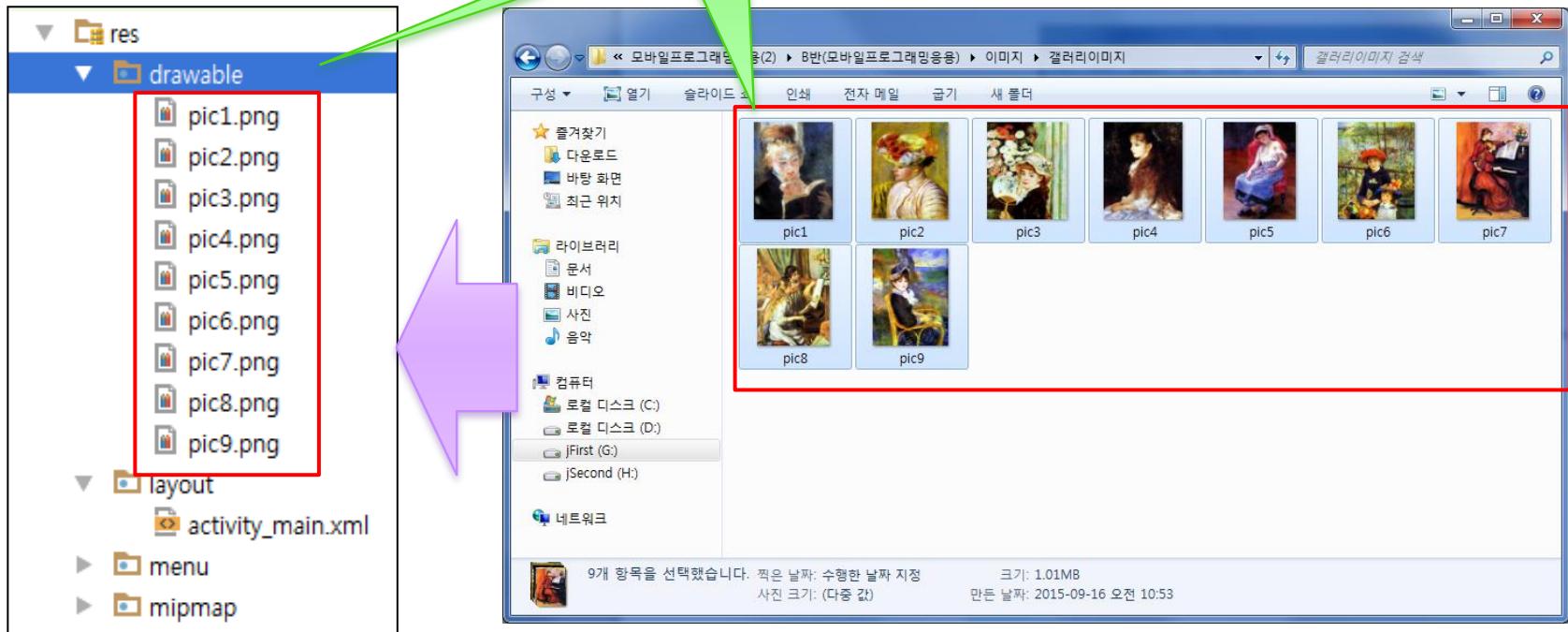
```
activity_main.xml x
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    tools:context=".MainActivity">

    <Gallery
        android:id="@+id/gallery01"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:spacing="5dp" />
    이미지 여백(갤러리 여백)

    <ImageView
        android:id="@+id/ivPoster"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:padding="20dp" />

</LinearLayout>
```

2. 이미지 복사

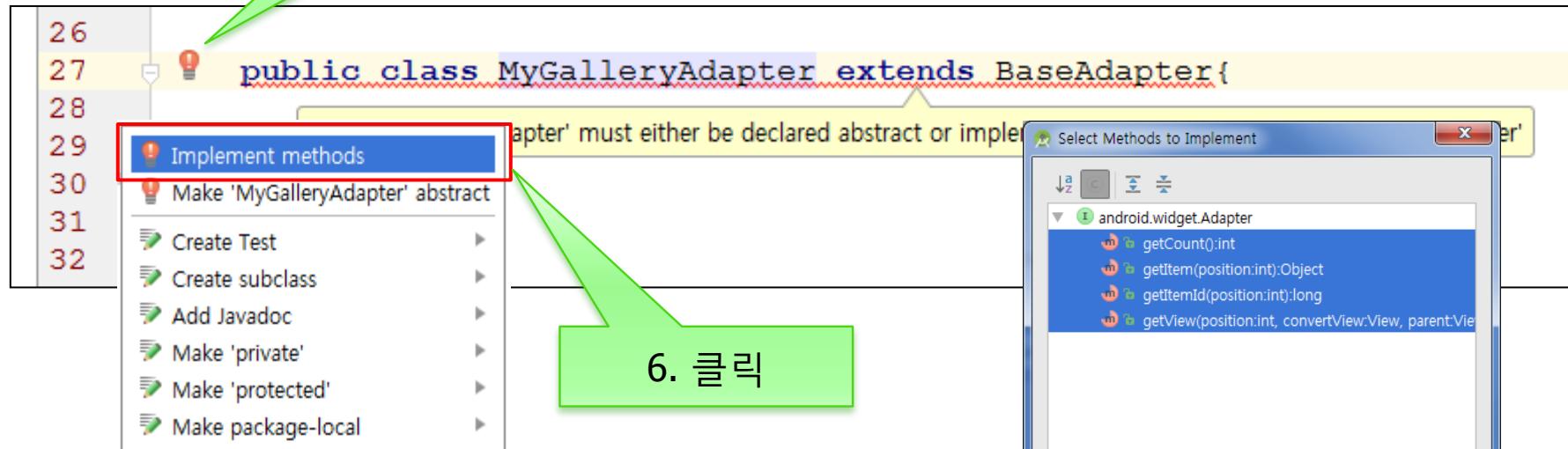


```
 MainActivity.java x
1 package com.example.admin.galley01;
2
3 import android.os.Bundle;
4 import android.support.v7.app.AppCompatActivity;
5 import android.view.View;
6 import android.view.ViewGroup;
7 import android.widget.BaseAdapter;
8 import android.widget.Gallery;
9 import android.widget.ImageView;
10
11 public class MainActivity extends AppCompatActivity {
12
13     @Override
14     protected void onCreate(Bundle savedInstanceState) {
15         super.onCreate(savedInstanceState);
16         setContentView(R.layout.activity_main);
17
18         setTitle("갤러리 연습");
19
20         Gallery gallery = (Gallery) findViewById(R.id.gallery01);
21
22         MyGalleryAdapter galAdapter = new MyGalleryAdapter(this);
23         gallery.setAdapter(galAdapter);
24
25     }
26
27     public class MyGalleryAdapter extends BaseAdapter{
28
29     }
30
31 }
```

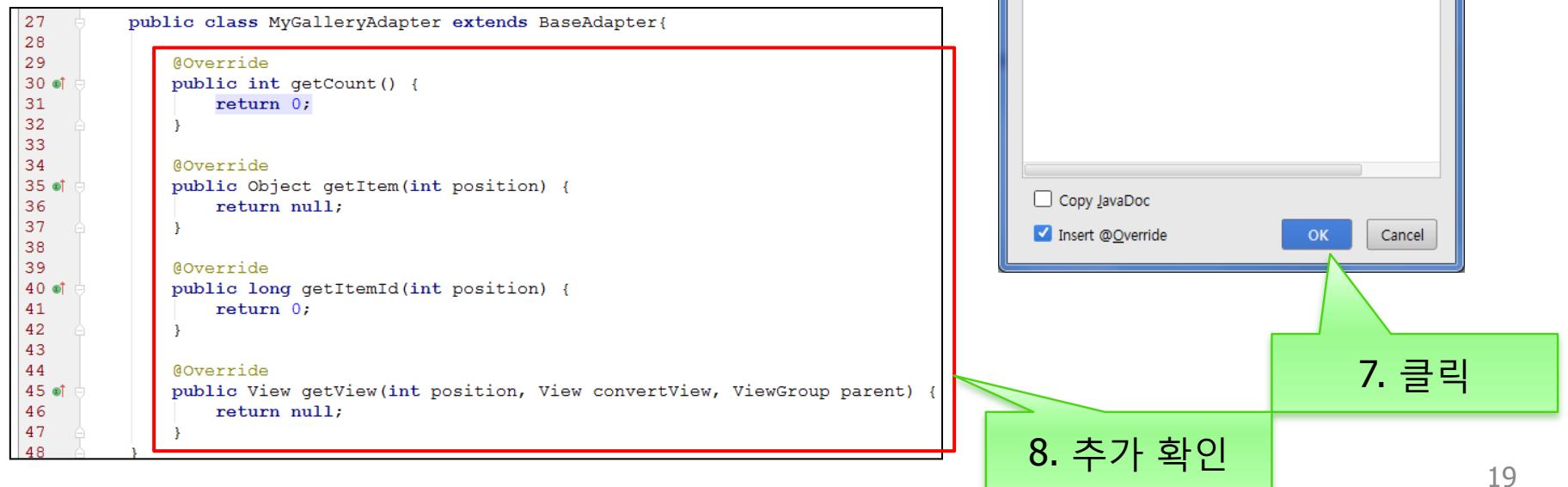
3. 추후 확인

4. 코딩

5. 클릭



6. 클릭



```
26  
27     public class MyGalleryAdapter extends BaseAdapter{  
28  
29         Context context;  
30         Integer[] posterID = {R.drawable.pic1, R.drawable.pic2,  
31                         R.drawable.pic3,R.drawable.pic4,R.drawable.pic5,  
32                         R.drawable.pic6,R.drawable.pic7,R.drawable.pic8,  
33                         R.drawable.pic9};  
34  
35         public MyGalleryAdapter(Context c) {  
36             context = c;  
37         }  
38  
39         @Override  
40         public int getCount() {  
41             return posterID.length;  
42         }  
43  
44         @Override  
45         public Object getItem(int position) {  
46             return null;  
47         }  
48  
49         @Override  
50         public long getItemId(int position) {  
51             return 0;  
52         }  
53  
54         @Override  
55         public View getView(int position, View convertView, ViewGroup parent) {  
56             return null;  
57         }  
58     }  
59 }  
60 }
```

9. 코딩

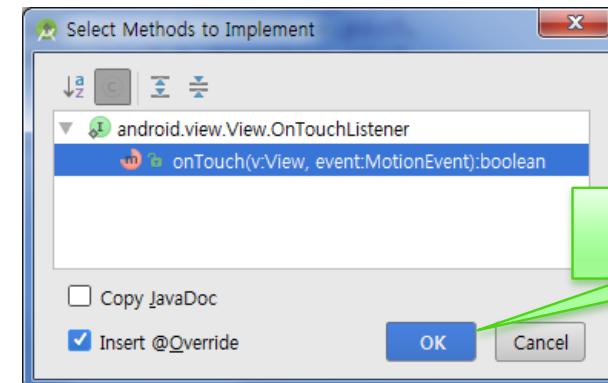
10. 코딩

```
55  
56     @Override  
57     public View getView(int position, View convertView, ViewGroup parent) {  
58         ImageView imageview = new ImageView(context);  
59         imageview.setLayoutParams(new Gallery.LayoutParams(100,150));  
60         imageview.setScaleType(ImageView.ScaleType.FIT_CENTER);  
61         imageview.setPadding(5,5,5,5);  
62         imageview.setImageResource(posterID[position]);  
63  
64         final int pos = position;  
65         imageview.setOnTouchListener(new View.OnTouchListener());  
66         return null;  
67     }  
68 }  
69 }
```

11. 클릭

```
63  
64     final int pos = position;  
65     imageview.setOnTouchListener(new View.OnTouchListener());  
66  
67     Implement methods  
68     Add import for 'android.view.View.OnTouchListener' ▶
```

12. 클릭



13. 클릭

```
56  
57     @Override  
58     public View getView(int position, View convertView, ViewGroup parent) {  
59         ImageView imageview = new ImageView(context);  
60         imageview.setLayoutParams(new Gallery.LayoutParams(100,150));  
61         imageview.setScaleType(ImageView.ScaleType.FIT_CENTER);  
62         imageview.setPadding(5,5,5,5);  
63         imageview.setImageResource(posterID[position]);  
64  
65         final int pos = position;  
66         imageview.setOnTouchListener(new View.OnTouchListener() {  
67             @Override  
68             public boolean onTouch(View v, MotionEvent event) {  
69                 ImageView ivPoster = (ImageView) findViewById(R.id.ivPoster);  
70                 ivPoster.setScaleType(ImageView.ScaleType.FIT_CENTER);  
71                 ivPoster.setImageResource(posterID[pos]);  
72                 return false;  
73             }  
74         });  
75         return imageview;  
76     }  
77 }  
78 }
```

14. 코딩

15. 클릭

