

액티비티와 인텐트



1. 액티비티와 인텐트

2

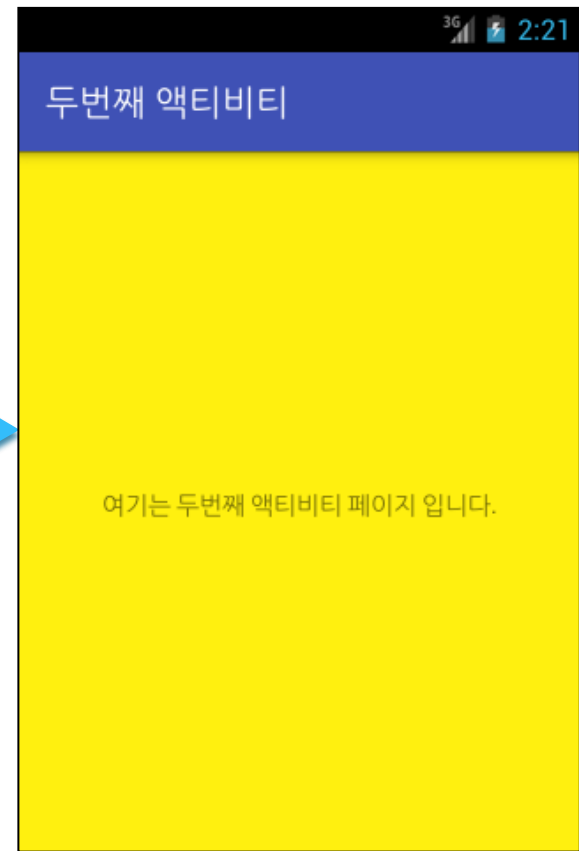
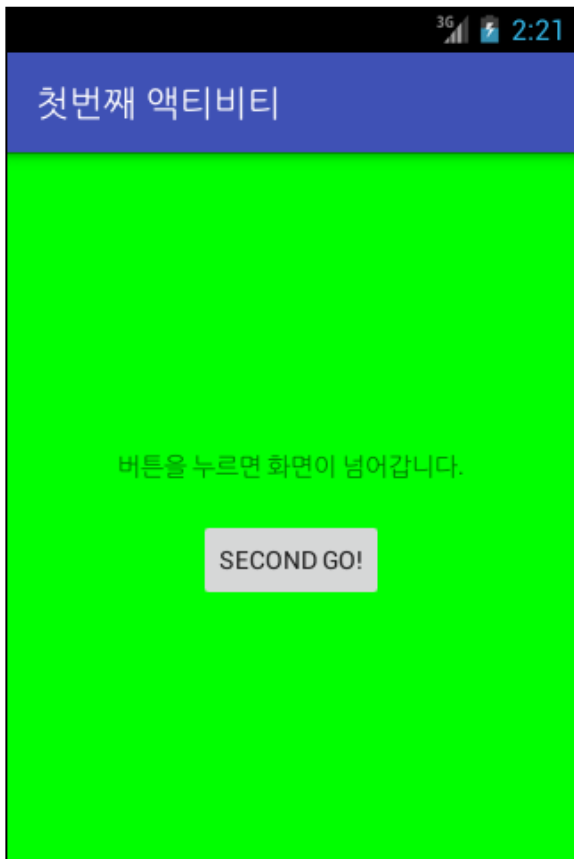
❖ 액티비티

- ✓ 액티비티 하나당 화면을 하나씩 생성할 수 있는데, 일반적으로 **액티비티 하나 당 XML 파일 하나**를 만들어서 사용한다.
- ✓ TestActivity.java 코드는 다음과 같이 Activity 클래스를 상속받으므로 TestActivity.java를 액티비티라고 부른다.

```
public class TestActivity extends Activity {  
    @Override  
    public void onCreate(Bundle savedInstanceState) {  
        ~~~~ 중간 생략 ~~~~  
    }  
}
```

Intent 구조

3



액티비티와 인텐트- 화면전환

4



Application name: **IntentBase**

Company Domain: **admid.example.com**

Project location: **C:\Android\StdWork\InnerClassBtn**

Target Android Devices

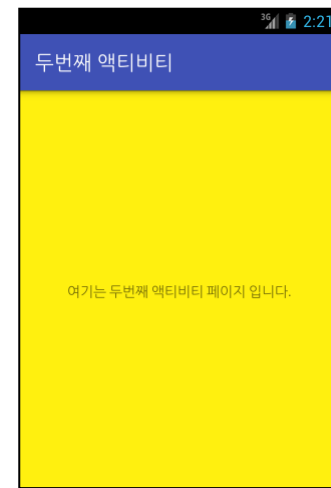
- **Phone and Tabet**
- **Minimun SDK API 15 : Android 4.0.3**

Add an activity to Mobile : **Empty Activity**

Customize the Activity

Activity Name: **MainActivity**

Layout Name: **activity_main**



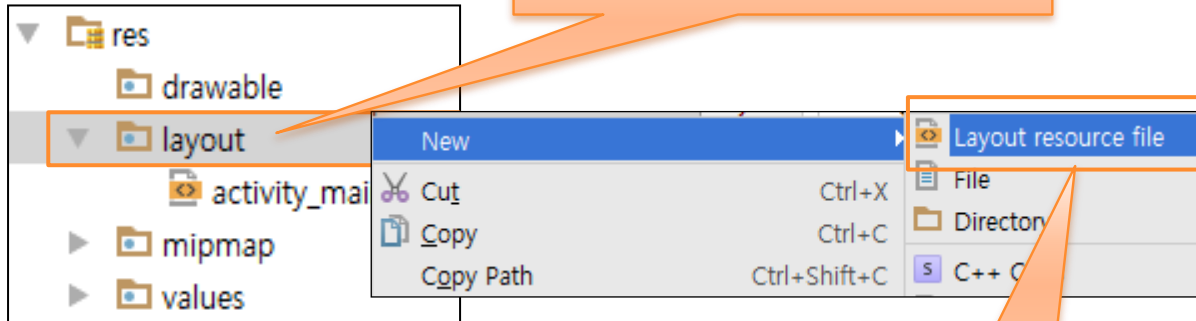
activity_main.xml x

```
1  <?xml version="1.0" encoding="utf-8"?>
2  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      android:layout_width="match_parent"
4      android:layout_height="match_parent"
5      android:background="#00FF00"
6      android:gravity="center"
7      android:orientation="vertical">
8
9      <TextView
10         android:layout_width="wrap_content"
11         android:layout_height="wrap_content"
12         android:text="버튼을 누르면 화면이 넘어갑니다."
13         android:layout_margin="20dp"/>
14
15     <Button
16         android:id="@+id/button"
17         android:layout_width="wrap_content"
18         android:layout_height="wrap_content"
19         android:text="Second Go!" />
20 </LinearLayout>
```

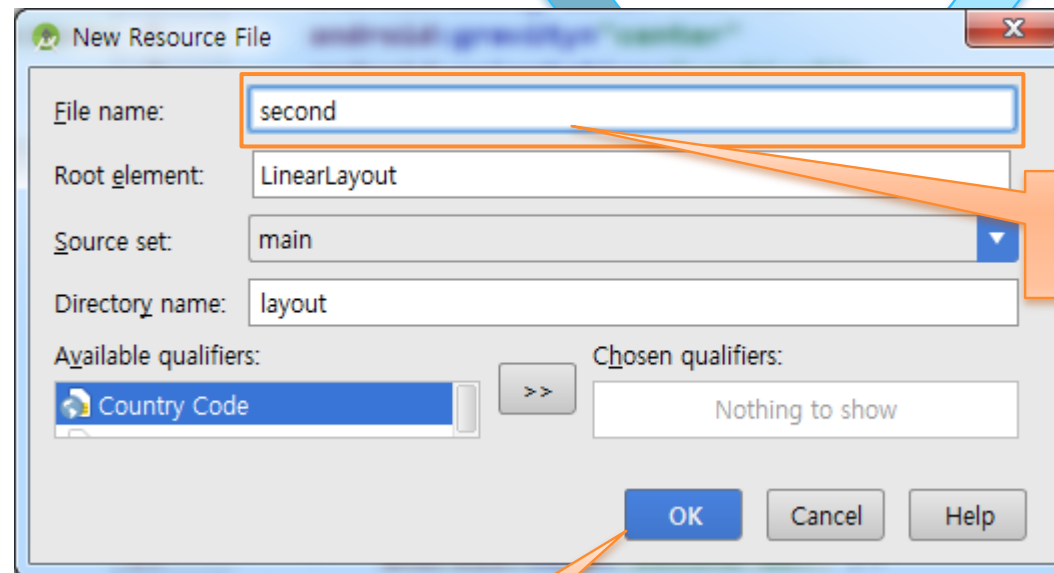
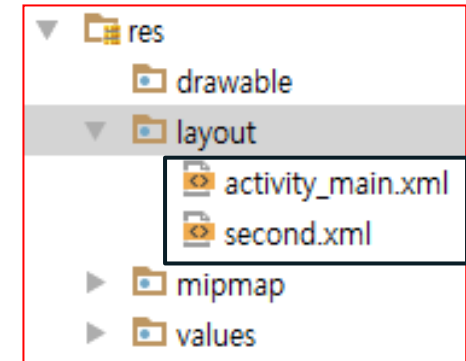
1. 코딩



2. 오른쪽 마우스 클릭



3. 클릭

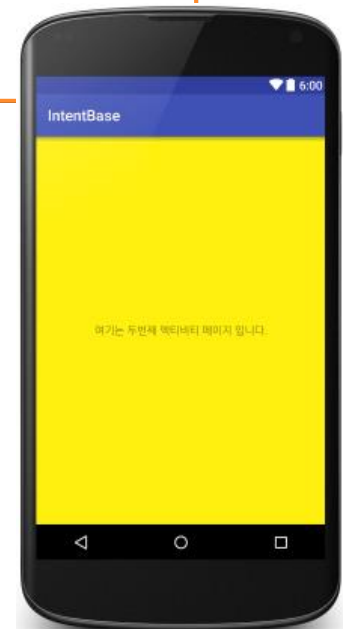


4. "second" 입력

5. 클릭

6.코딩

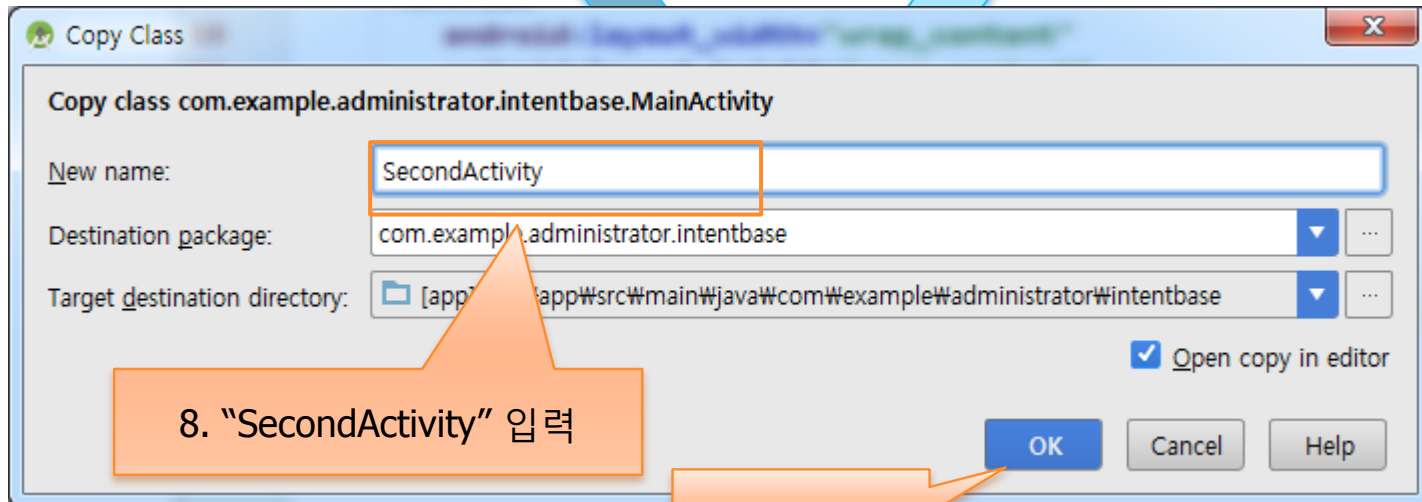
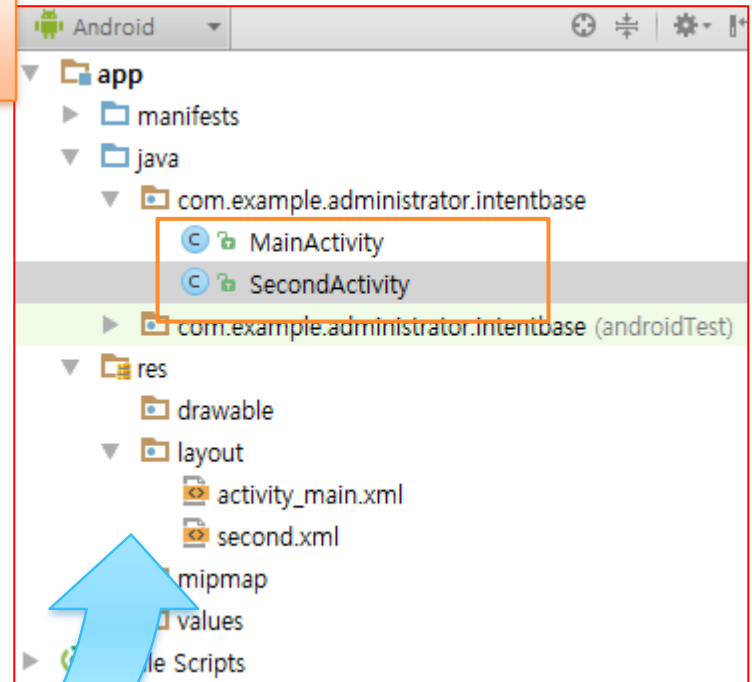
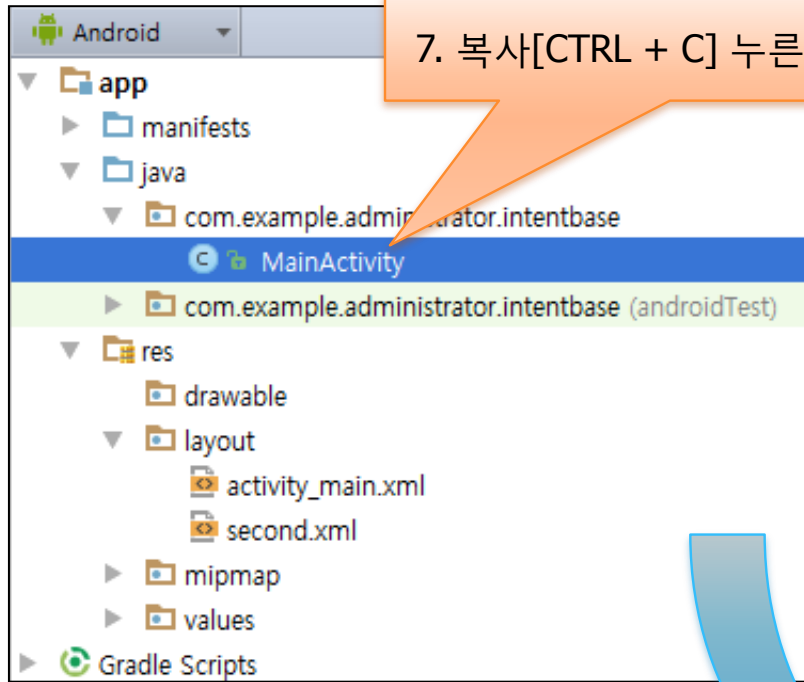
```
1  <?xml version="1.0" encoding="utf-8"?>
2  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      android:layout_width="match_parent"
4      android:layout_height="match_parent"
5      android:background="#FFF00F"
6      android:gravity="center"
7      android:orientation="vertical">
8
9      <TextView
10         android:layout_width="wrap_content"
11         android:layout_height="wrap_content"
12         android:text="여기는 두번째 액티비티 페이지 입니다." />
13 </LinearLayout>
```



액티비티 파일 생성(복사하여 수정)

8

7. 복사[CTRL + C] 누른 후 CTRL + V]



8. "SecondActivity" 입력

9. 클릭


```
1 package com.example.administrator.intentbase;
2
3 import ...
4
5
6
7
8
9 public class MainActivity extends AppCompatActivity {
10
11     Button btnNewActivity;
12
13     @Override
14     protected void onCreate(Bundle savedInstanceState) {
15         super.onCreate(savedInstanceState);
16         setContentView(R.layout.activity_main);
17         setTitle("첫번째 액티비티");
18
19         btnNewActivity = (Button)findViewById(R.id.button);
20
21         btnNewActivity.setOnClickListener(new View.OnClickListener() {
22             @Override
23             public void onClick(View v) {
24                 Intent intent = new Intent(MainActivity.this,
25                     SecondActivity.class);
26                 startActivity(intent);
27             }
28         });
29     }
30 }
```

10. 코딩

```
SecondActivity.java x
1  package com.example.administrator.intentbase;
2
3  import android.os.Bundle;
4  import android.support.v7.app.AppCompatActivity;
5
6  public class SecondActivity extends AppCompatActivity {
7
8      @Override
9      protected void onCreate(Bundle savedInstanceState) {
10         super.onCreate(savedInstanceState);
11         setContentView(R.layout.second);
12         setTitle("두번째 액티비티");
13     }
14 }
```

11. 코딩



```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.administrator.intentbase">

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="IntentBase"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".MainActivity">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>

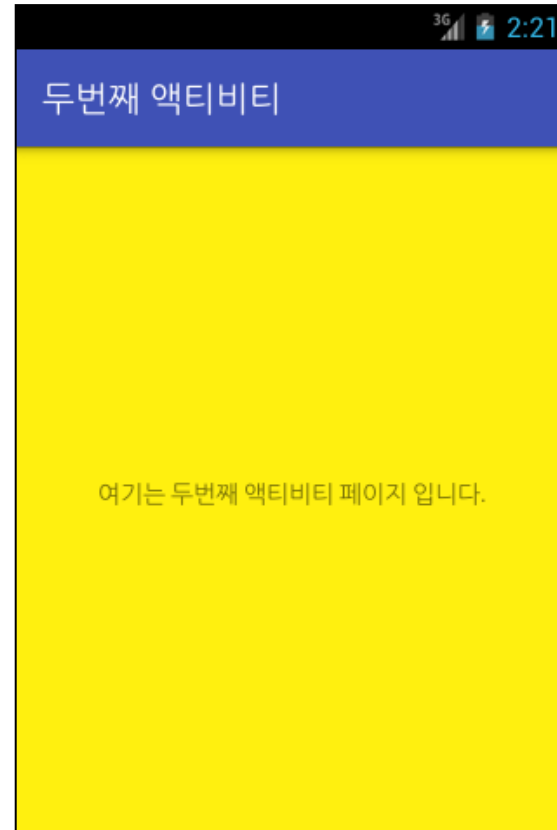
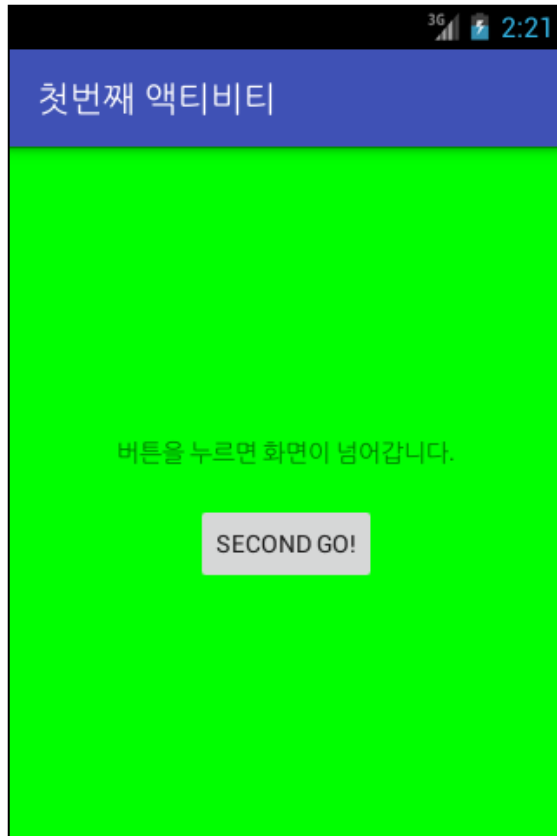
        <activity android:name=".SecondActivity" />

    </application>

</manifest>
```

12. 추가

✓ 사용될 액티비티는 AndroidManifest.xml에 꼭 등록해야 한다.



```
second.xml x
1  <?xml version="1.0" encoding="utf-8"?>
2  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      android:layout_width="match_parent"
4      android:layout_height="match_parent"
5      android:background="#FFF00F"
6      android:gravity="center"
7      android:orientation="vertical">
8
9      <TextView
10         android:layout_width="wrap_content"
11         android:layout_height="wrap_content"
12         android:text="여기는 두번째 액티비티 페이지 입니다." />
13
14         <Button
15             android:id="@+id/Backbtn"
16             android:layout_width="wrap_content"
17             android:layout_height="wrap_content"
18             android:text="돌아가기"/>
19     </LinearLayout>
```

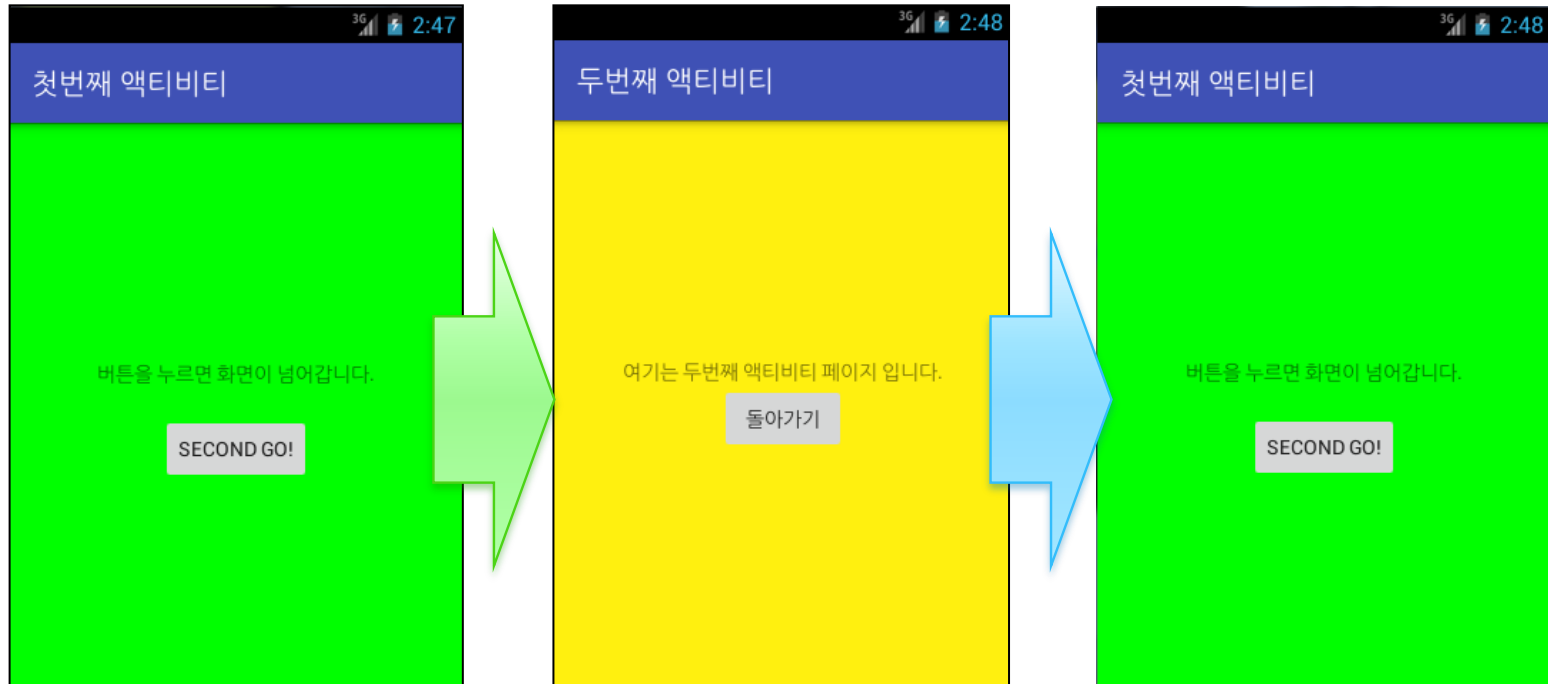
13. 버튼 추가



```
SecondActivity.java x
1  package com.example.administrator.intentbase;
2
3  import ...
7
8  public class SecondActivity extends AppCompatActivity {
9
10     Button backbtn;
11
12     @Override
13     protected void onCreate(Bundle savedInstanceState) {
14         super.onCreate(savedInstanceState);
15         setContentView(R.layout.second);
16         setTitle("두번째 액티비티");
17
18         backbtn = (Button)findViewById(R.id.Backbtn);
19
20         backbtn.setOnClickListener(new View.OnClickListener() {
21             @Override
22             public void onClick(View v) {
23                 finish();
24             }
25         });
26     }
27 }
```

14. 추가

현재 액티비티를 종료



```
second.xml x
<?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:background="#FFF00F"
    android:gravity="center"
    android:orientation="vertical">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="여기는 두번째 액티비티 페이지 입니다." />

    <Button
        android:id="@+id/Backbtn"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="MainActivity Go!"/>

</LinearLayout>
```

15. 수정


```

1  package com.example.administrator.intentbase;
2
3  import ...
4
5
6
7
8
9  public class SecondActivity extends AppCompatActivity {
10
11      Button backbtn;
12
13      @Override
14      protected void onCreate(Bundle savedInstanceState) {
15          super.onCreate(savedInstanceState);
16          setContentView(R.layout.second);
17          setTitle("두번째 액티비티");
18
19          backbtn = (Button)findViewById(R.id.Backbtn);
20
21          backbtn.setOnClickListener(new View.OnClickListener() {
22              @Override
23              public void onClick(View v) {
24                  Intent intent = new Intent(SecondActivity.this,
25                      MainActivity.class);
26                  startActivity(intent);
27              }
28          });
29      }
30  }

```

16. 수정



액티비티와 인텐트- 선택 화면전환



Application name: **SelectIntent**

Company Domain: **admid.example.com**

Project location: **C:\Android\StdWork\SelectIntent**

Target Android Devices

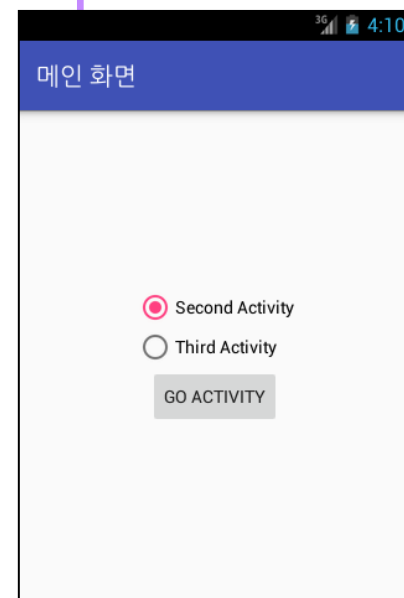
- **Phone and Tabet**
- **Minimun SDK API 15 : Android 4.0.3**

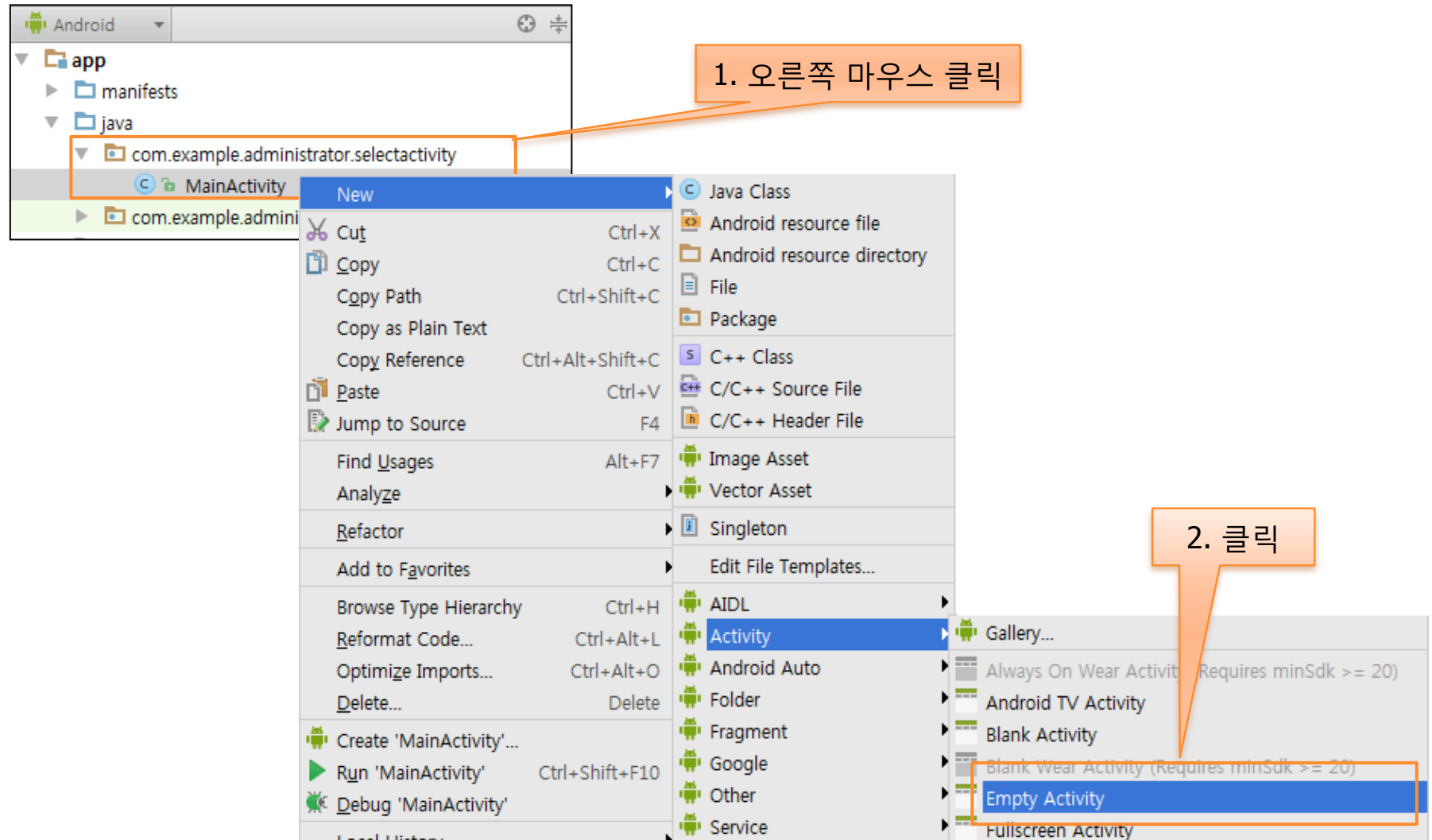
Add an activity to Mobile : **Empty Activity**

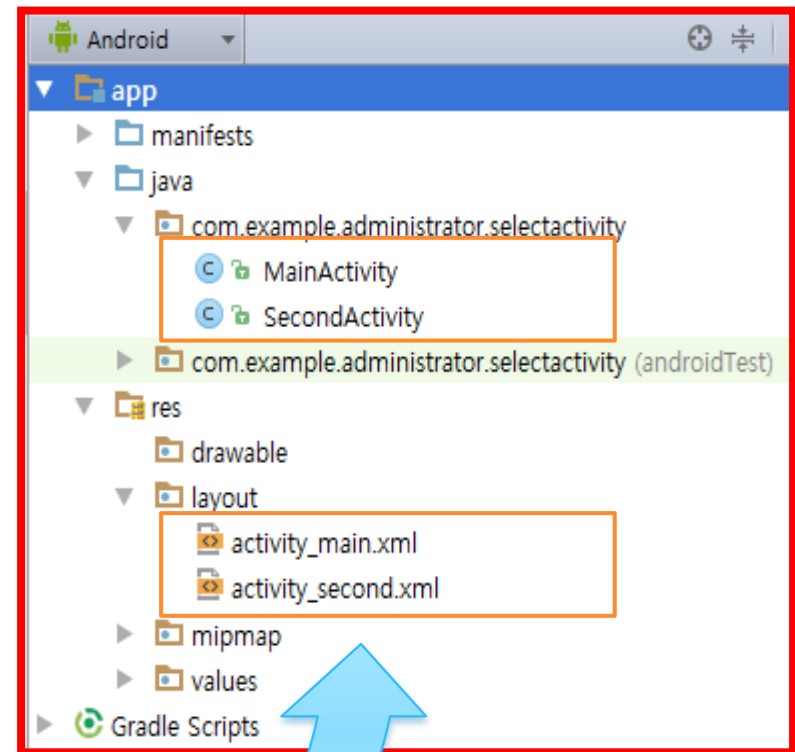
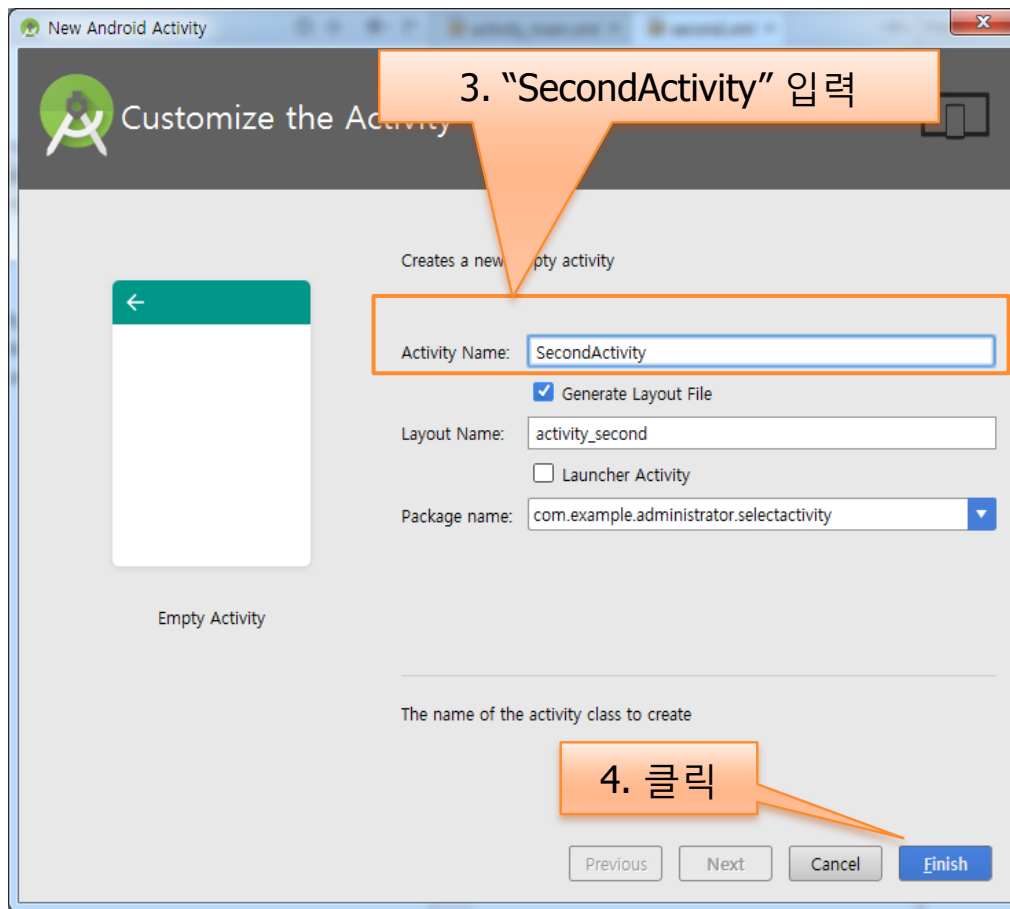
Customize the Activity

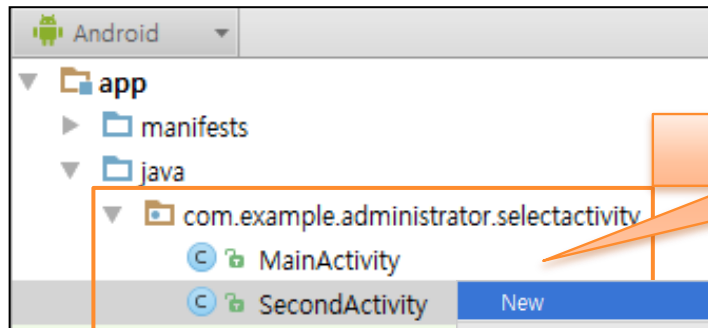
Activity Name: **MainActivity**

Layout Name: **activity_main**

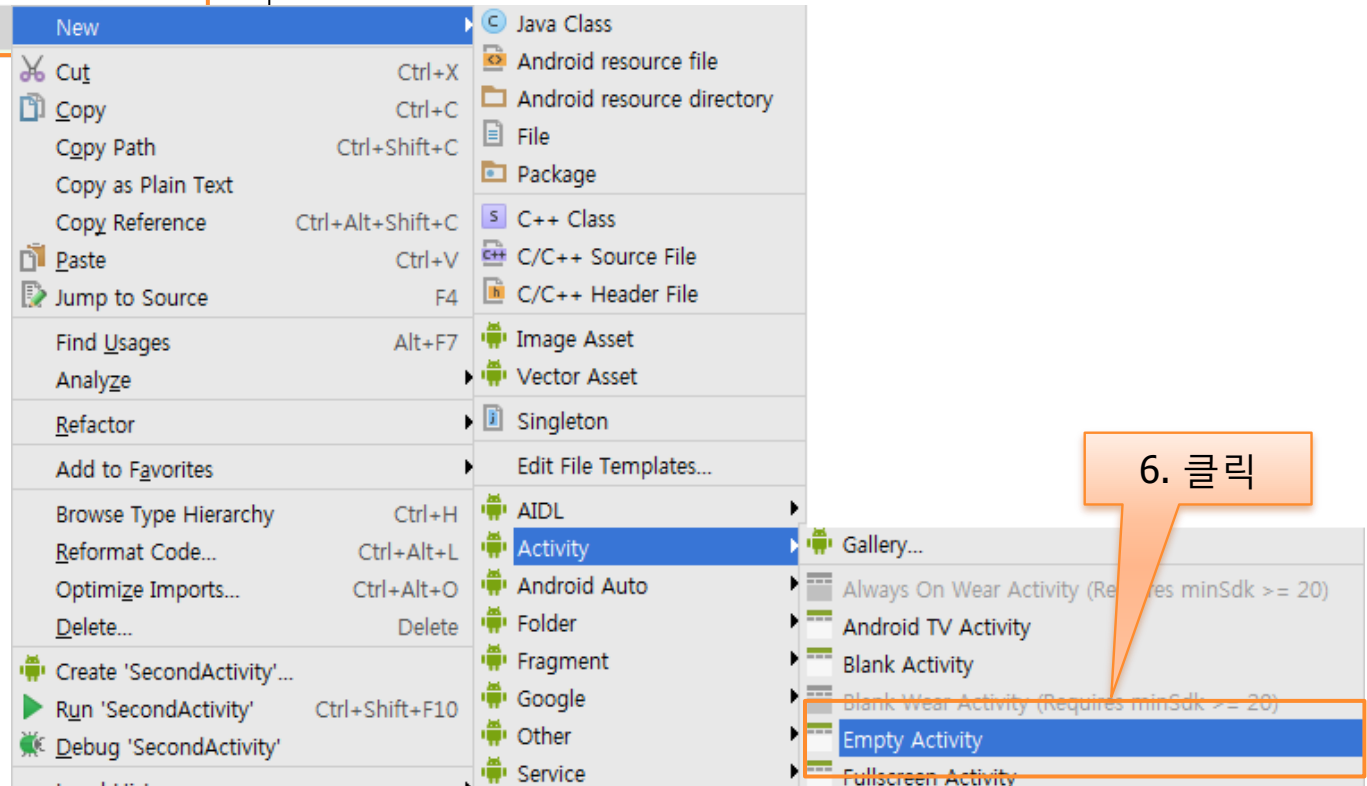


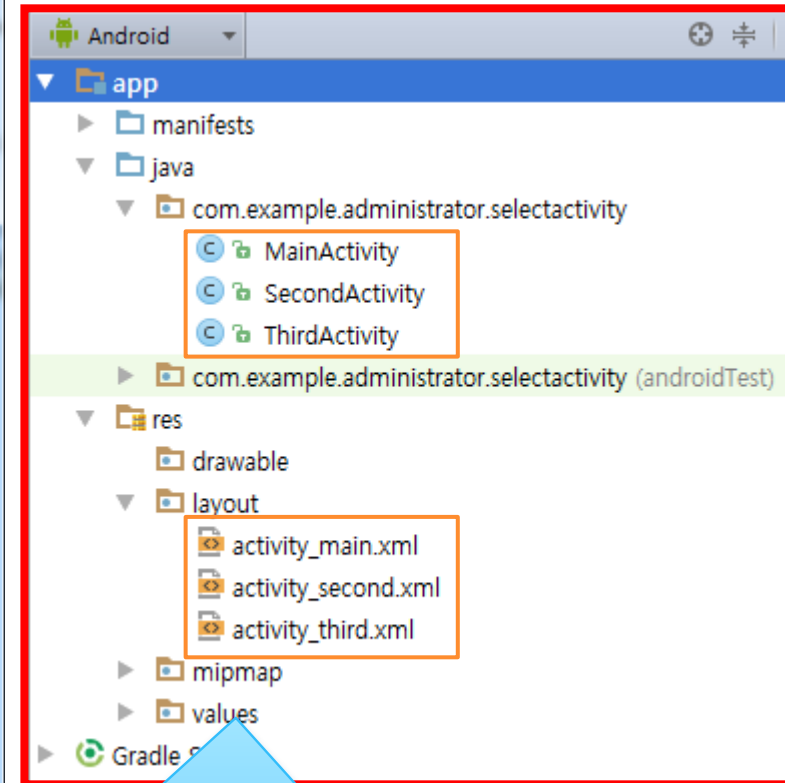
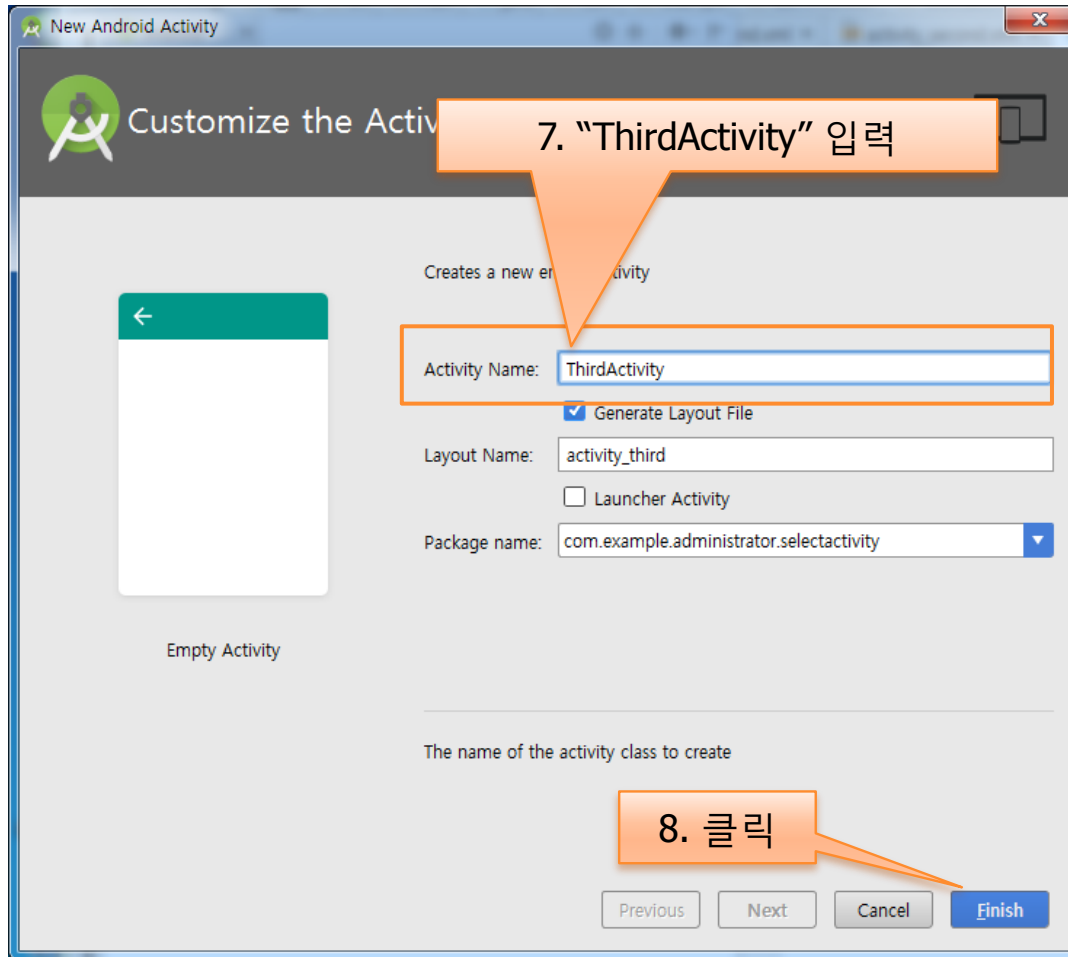






5. 오른쪽 마우스 클릭

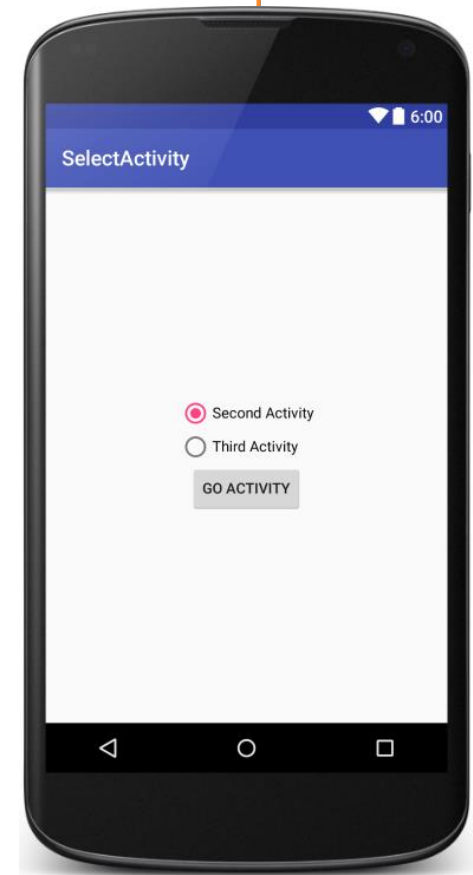




activity_main.xml x

```
1  <?xml version="1.0" encoding="utf-8"?>
2  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      android:layout_width="match_parent"
4      android:layout_height="match_parent"
5      android:gravity="center"
6      android:orientation="vertical">
7      <RadioGroup
8          android:id="@+id/radioGroup"
9          android:layout_width="wrap_content"
10         android:layout_height="wrap_content"
11         android:text="Hello World!">
12         <RadioButton
13             android:id="@+id/radioSecond"
14             android:layout_width="wrap_content"
15             android:layout_height="wrap_content"
16             android:checked="true"
17             android:text="Second Activity" />
18         <RadioButton
19             android:id="@+id/radioThird"
20             android:layout_width="wrap_content"
21             android:layout_height="wrap_content"
22             android:text="Third Activity" />
23     </RadioGroup>
24     <Button
25         android:id="@+id/btn"
26         android:layout_width="wrap_content"
27         android:layout_height="wrap_content"
28         android:text="GO Activity" />
29 </LinearLayout>
```

9. 코딩




```
activity_second.xml x
1  <?xml version="1.0" encoding="utf-8"?>
2  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      android:layout_width="match_parent"
4      android:layout_height="match_parent"
5      android:gravity="center"
6      android:orientation="vertical">
7
8      <TextView
9          android:layout_width="wrap_content"
10         android:layout_height="wrap_content"
11         android:text="Second Activity 입니다." />
12
13     <Button
14         android:id="@+id/secondbtn"
15         android:layout_width="wrap_content"
16         android:layout_height="wrap_content"
17         android:text="back first" />
18 </LinearLayout>
```



11. 코딩

```
activity_third.xml x
<?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">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Third Activity 입니다." />

    <Button
        android:id="@+id/thirdbtn"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="back first" />
</LinearLayout>
```



12. 코딩

```

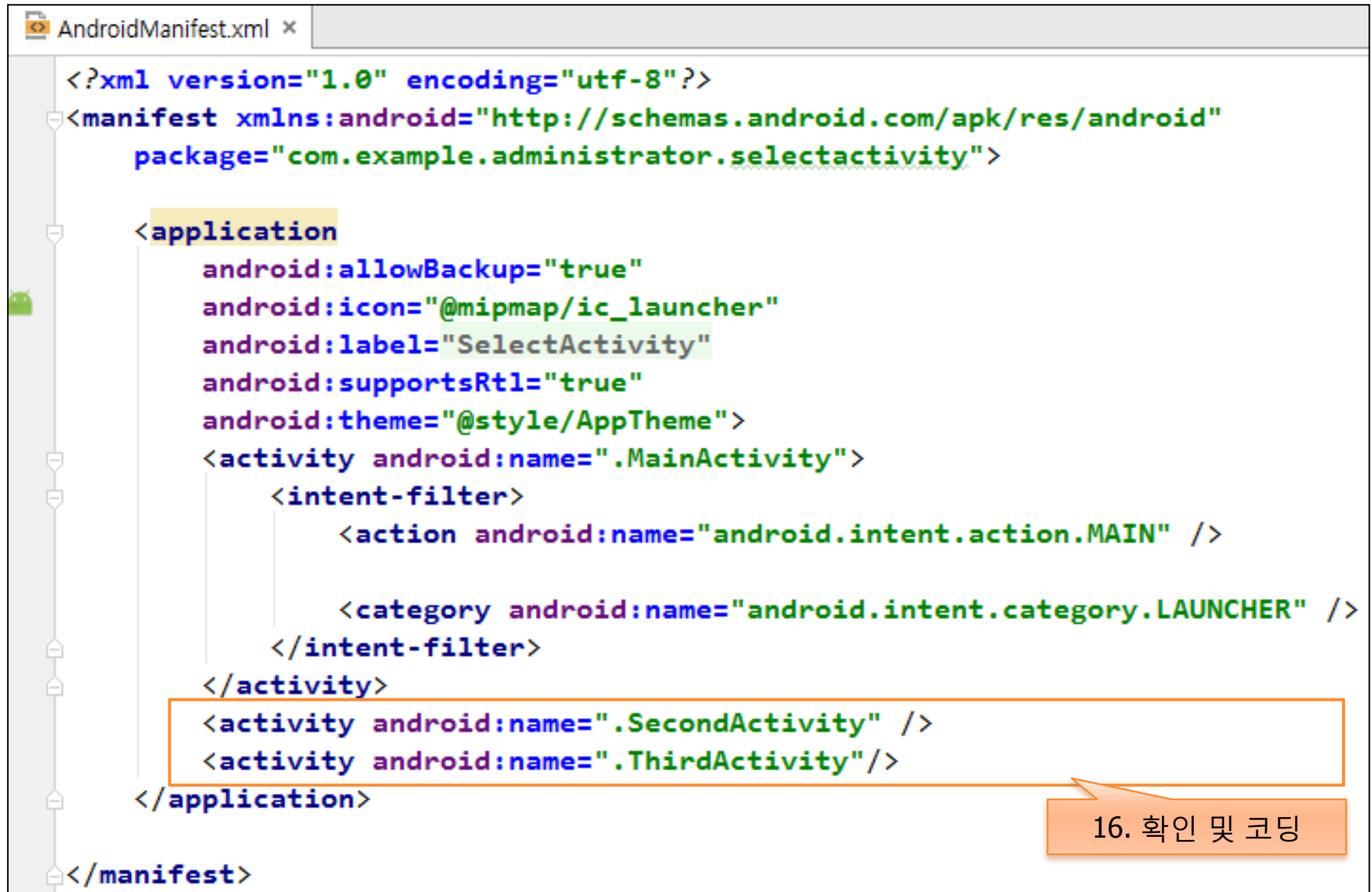
1  package com.example.administrator.selectactivity;
2
3  import ...
9
10 public class MainActivity extends AppCompatActivity {
11
12     RadioButton radioBtnSecond;
13     Button btnFirst;
14     Intent intent;
15
16     @Override
17     protected void onCreate(Bundle savedInstanceState) {
18         super.onCreate(savedInstanceState);
19         setContentView(R.layout.activity_main);
20
21         setTitle("메인 화면");
    
```

13. 코딩

```
20
21 setTitle("메인 화면");
22 btnFirst = (Button) findViewById(R.id.btn);
23 radioBtnSecond = (RadioButton) findViewById(R.id.radioSecond);
24
25 btnFirst.setOnClickListener(new View.OnClickListener() {
26     @Override
27     public void onClick(View v) {
28
29         if (radioBtnSecond.isChecked())
30             intent = new Intent(getApplicationContext(),
31                                     SecondActivity.class);
32         else
33             intent = new Intent(getApplicationContext(),
34                                     ThirdActivity.class);
35         startActivity(intent);
36     }
37 });
38 }
39 }
```

```
SecondActivity.java x
1  package com.example.administrator.selectactivity;
2
3  import ...
7
8  public class SecondActivity extends AppCompatActivity {
9
10     Button btnSecond;
11
12     @Override
13     protected void onCreate(Bundle savedInstanceState) {
14         super.onCreate(savedInstanceState);
15         setContentView(R.layout.activity_second);
16
17         setTitle("Second 화면");
18         btnSecond = (Button)findViewById(R.id.secondbtn);
19
20         btnSecond.setOnClickListener(new View.OnClickListener() {
21             @Override
22             public void onClick(View v) {
23                 finish();
24             }
25         });
26     }
27 }
```

```
ThirdActivity.java x
1  package com.example.administrator.selectactivity;
2
3  import ...
7
8  public class ThirdActivity extends AppCompatActivity {
9
10     Button btnThird;
11
12     @Override
13     protected void onCreate(Bundle savedInstanceState) {
14         super.onCreate(savedInstanceState);
15         setContentView(R.layout.activity_third);
16
17         setTitle("Third 화면");
18
19         btnThird = (Button)findViewById(R.id.thirdbtn);
20
21         btnThird.setOnClickListener(new View.OnClickListener() {
22             @Override
23             public void onClick(View v) {
24                 finish();
25             }
26         });
27     }
28 }
```



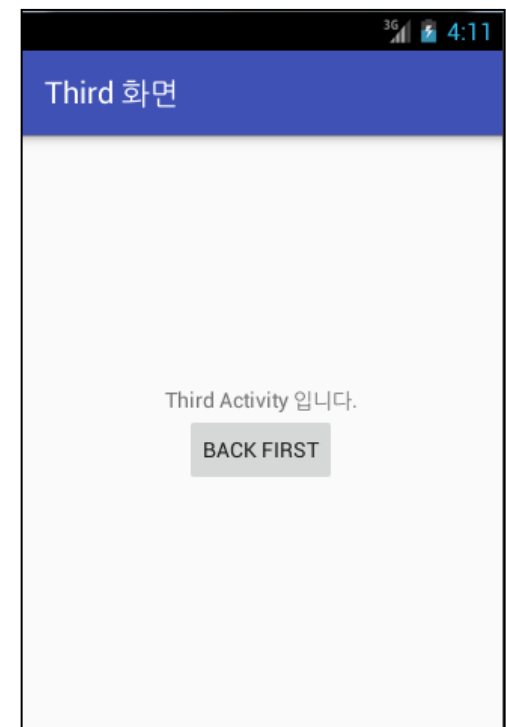
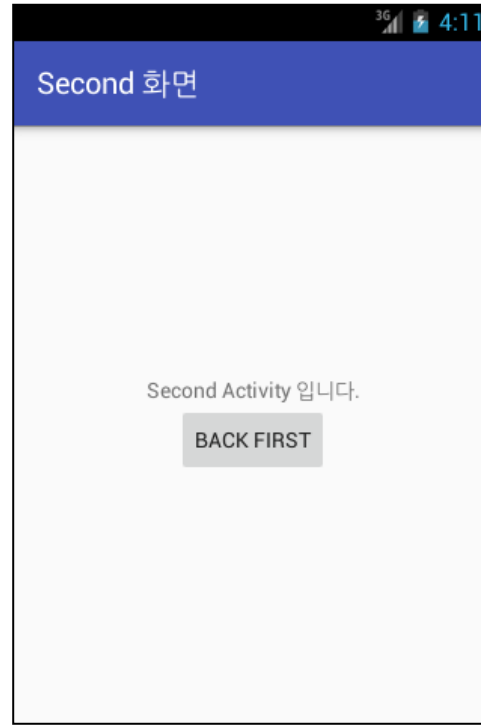
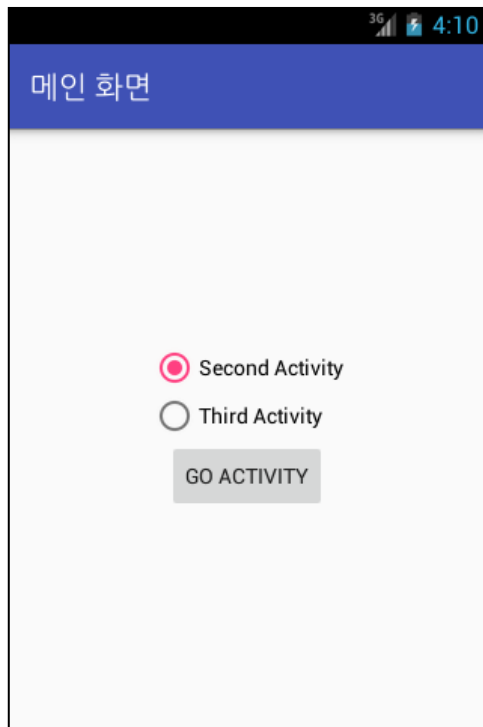
```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.administrator.selectactivity">

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="SelectActivity"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".MainActivity">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
        <activity android:name=".SecondActivity" />
        <activity android:name=".ThirdActivity"/>
    </application>

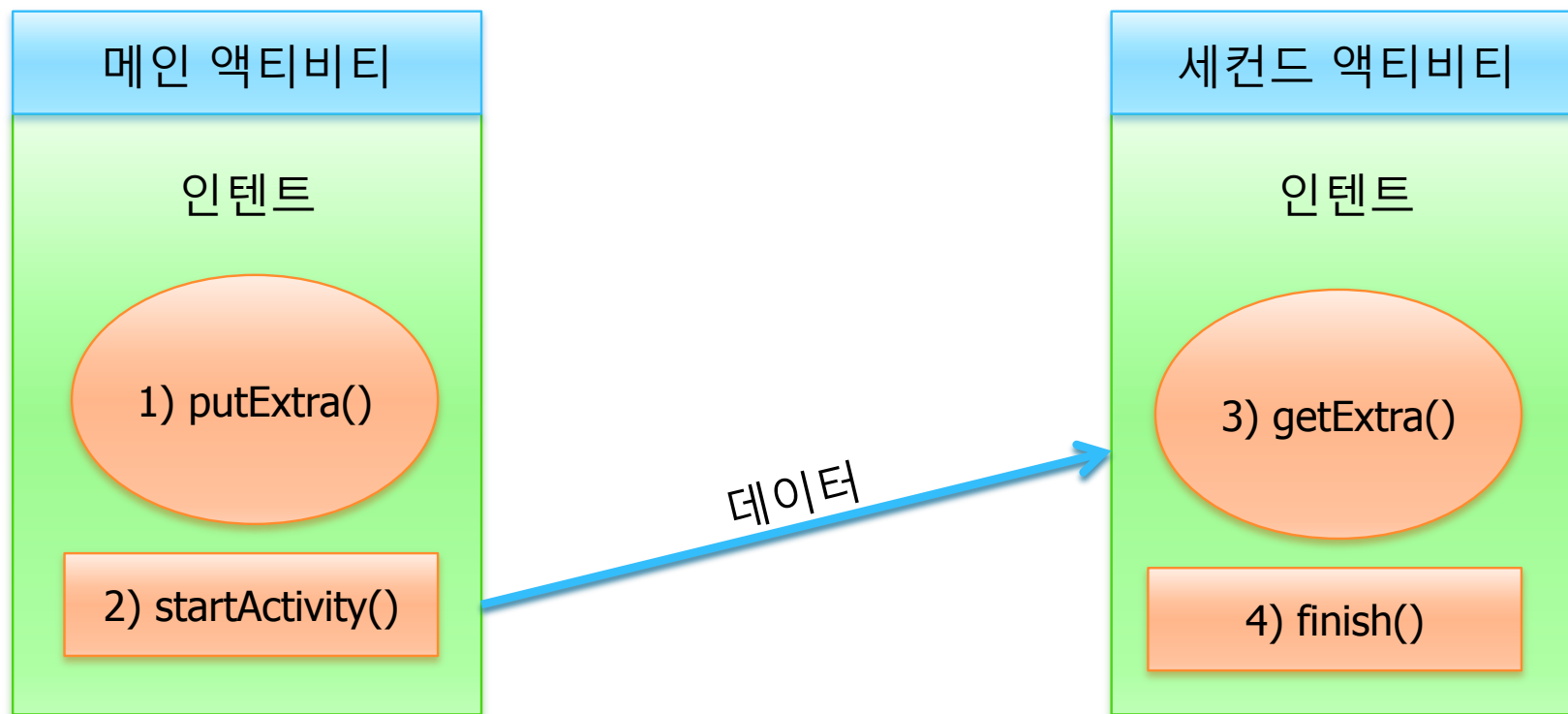
</manifest>
```

16. 확인 및 코딩



Activity Data 전송 - 하나

- 메인 액티비티에서 세컨드 액티비티로 데이터 전송 방식 (단방향)



프로젝트 생성

34



Application name: **DatasendIntent**

Company Domain: **admid.example.com**

Project location: **C:\Android\StdWork\DatasendIntent**

Target Android Devices

- **Phone and Tabet**
- **Minimun SDK API 15 : Android 4.0.3**

Add an activity to Mobile : **Empty Activity**

Customize the Activity

Activity Name: **MainActivity**

Layout Name: **activity_main**

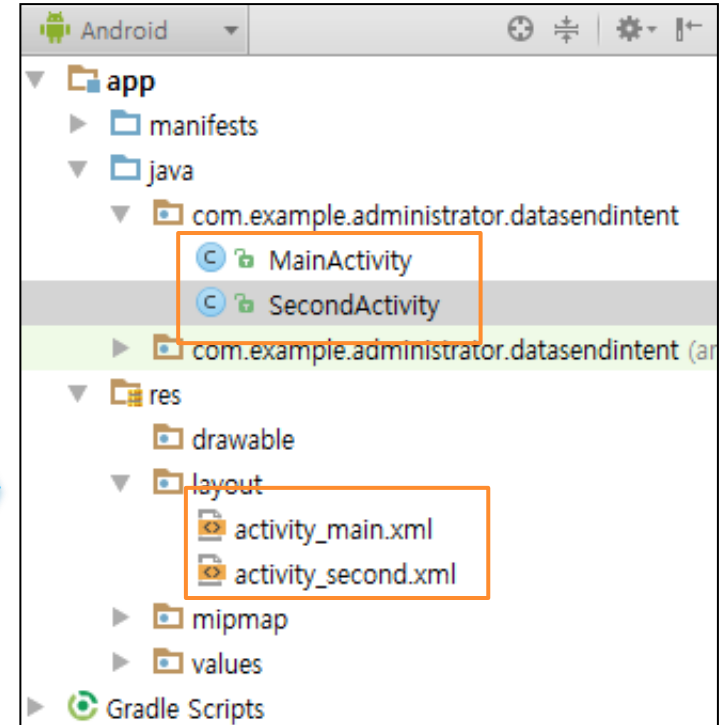
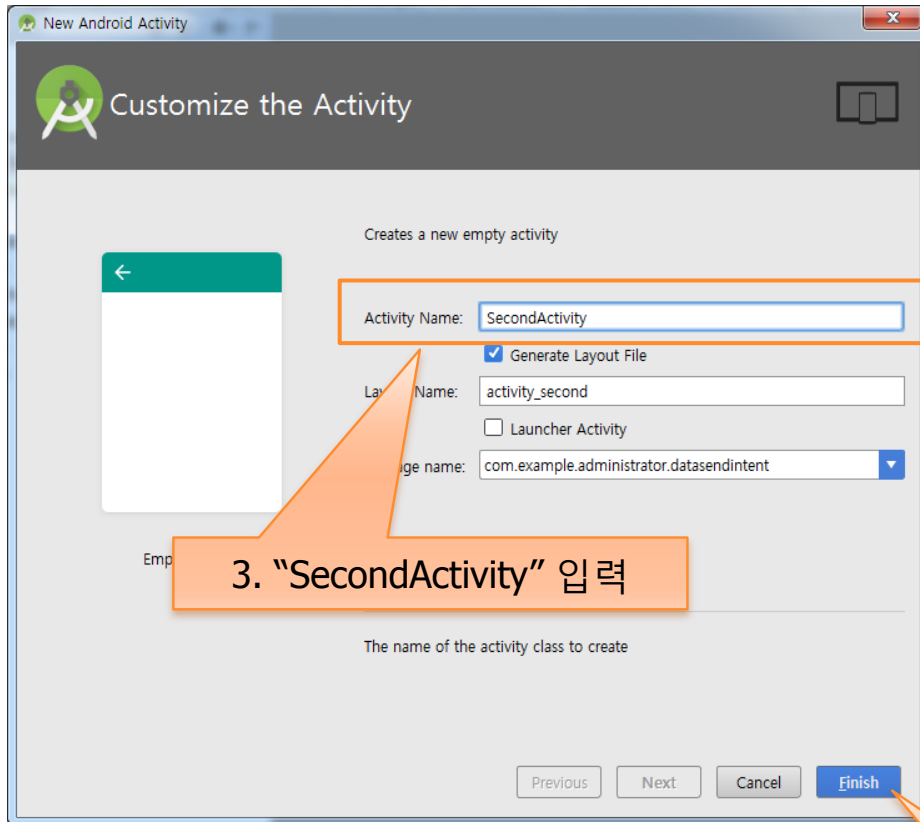


1. 오른쪽 마우스 클릭

2. 클릭

The screenshot shows the Android Studio interface. In the Project Explorer on the left, the package `com.example.adminis` is selected. A right-click context menu is open over this package. The 'New' option is selected, opening a submenu. In this submenu, the 'Activity' option is selected, which opens another submenu. In this final submenu, the 'Empty Activity' option is highlighted. Two orange callout boxes provide instructions: '1. 오른쪽 마우스 클릭' (Right-click) and '2. 클릭' (Click).

secondActivity 추가



```
activity_main.xml x
1  <?xml version="1.0" encoding="utf-8"?>
2  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      android:layout_width="match_parent"
4      android:layout_height="match_parent"
5      android:gravity="center"
6      android:orientation="vertical">
7      <TextView
8          android:layout_width="wrap_content"
9          android:layout_height="wrap_content"
10         android:textSize="20dp"
11         android:text="두 수의 합 구하기!" />
12     <LinearLayout
13         android:layout_width="match_parent"
14         android:layout_height="wrap_content"
15         android:orientation="horizontal">
16         <TextView
17             android:layout_width="wrap_content"
18             android:layout_height="wrap_content"
19             android:text="첫 번째 숫자 : " />
20         <EditText
21             android:id="@+id/edtFirst"
22             android:layout_width="match_parent"
23             android:layout_height="wrap_content"
24             android:hint="숫자 입력" />
25     </LinearLayout>
```

5. 코딩



```
activity_main.xml x
26
27 <LinearLayout
28     android:layout_width="match_parent"
29     android:layout_height="wrap_content"
30     android:orientation="horizontal">
31     <TextView
32         android:layout_width="wrap_content"
33         android:layout_height="wrap_content"
34         android:text="두 번째 숫자 : " />
35     <EditText
36         android:id="@+id/edtSecond"
37         android:layout_width="match_parent"
38         android:layout_height="wrap_content"
39         android:hint="숫자 입력" />
40 </LinearLayout>
41 <Button
42     android:id="@+id/hapbtn"
43     android:layout_width="wrap_content"
44     android:layout_height="wrap_content"
45     android:text="합 구하기" />
46 </LinearLayout>
```

6. 코딩



7. 코딩

```
1  <?xml version="1.0" encoding="utf-8"?>
2  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      android:layout_width="match_parent"
4      android:layout_height="match_parent"
5      android:gravity="center"
6      android:orientation="vertical">
7
8      <TextView
9          android:layout_width="wrap_content"
10         android:layout_height="wrap_content"
11         android:text="입력된 수의 합은" />
12
13     <TextView
14         android:id="@+id/rusultText"
15         android:layout_width="wrap_content"
16         android:layout_height="wrap_content"
17         android:text="Null" />
18
19     <Button
20         android:layout_width="wrap_content"
21         android:layout_height="wrap_content"
22         android:id="@+id/finishBtn"
23         android:layout_marginTop="20dp"
24         android:text="Finish"/>
25 </LinearLayout>
```



```
MainActivity.java x
1 package com.example.administrator.datasendintent;
2
3 import android.content.Intent;
4 import android.os.Bundle;
5 import android.support.v7.app.AppCompatActivity;
6 import android.view.View;
7 import android.widget.Button;
8 import android.widget.EditText;
9
```

```
MainActivity.java x
9
10 public class MainActivity extends AppCompatActivity {
11
12     EditText editTextFirst, editTextSecond;
13     Button hapBtn;
14
15     @Override
16     protected void onCreate(Bundle savedInstanceState) {
17         super.onCreate(savedInstanceState);
18         setContentView(R.layout.activity_main);
19
20         setTitle("두 수를 입력하는 액티비티");
21
```

8. 코딩


```
19 setTitle("두 수를 입력하는 액티비티");
20
21
22 editTextFirst = (EditText) findViewById(R.id.edtFirst);
23 editTextSecond = (EditText) findViewById(R.id.edtSecond);
24 hapBtn = (Button) findViewById(R.id.hapbtn);
25
26 editTextFirst.setText("0");
27 editTextSecond.setText("0");
28
29 hapBtn.setOnClickListener(new View.OnClickListener() {
30     @Override
31     public void onClick(View v) {
32         Intent intent = new Intent(getApplicationContext(),
33             SecondActivity.class);
34         intent.putExtra("Num1", editTextFirst.getText().toString());
35         intent.putExtra("Num2", editTextSecond.getText().toString());
36         startActivity(intent);
37     }
38 });
39
40 }
```

```
SecondActivity.java x
1 package com.example.administrator.datasendintent;
2
3 import android.content.Intent;
4 import android.os.Bundle;
5 import android.support.v7.app.AppCompatActivity;
6 import android.view.View;
7 import android.widget.Button;
8 import android.widget.TextView;
9
```

```
SecondActivity.java x
9
10 public class SecondActivity extends AppCompatActivity {
11
12     Button finishBtn;
13     TextView resultText;
14
15     int hap;
16
17     @Override
```

10. 코딩

SecondActivity.java x

11. 코딩

```
17  @Override
18  protected void onCreate(Bundle savedInstanceState) {
19      super.onCreate(savedInstanceState);
20      setContentView(R.layout.activity_second);
21
22      setTitle("결과 화면");
23
24      finishBtn = (Button)findViewById(R.id.finishBtn);
25      resultText = (TextView)findViewById(R.id.resultText);
26
27      Intent inIntent = getIntent();
28      String FirstText = inIntent.getStringExtra("Num1");
29      String SecondText = inIntent.getStringExtra("Num2");
30
31      hap = Integer.parseInt(FirstText) + Integer.parseInt(SecondText);
32      resultText.setText(String.valueOf(hap));
33
34      finishBtn.setOnClickListener(new View.OnClickListener() {
35          @Override
36          public void onClick(View v) {
37              finish();
38          }
39      });
40  }
41  }
```

"Num1","Num2"
메인 액티비티에
서 넘어온 데이터

```
AndroidManifest.xml x
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.administrator.datasendintent">

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="DdatasendIntent"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".MainActivity">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
        <activity android:name=".SecondActivity"></activity>
    </application>

</manifest>
```

추가 확인

3G 1:59

두 수를 입력하는 액티비티

두 수의 합 구하기!

첫 번째 숫자: 5

두 번째 숫자: 20

합구하기

3G 2:00

결과 화면

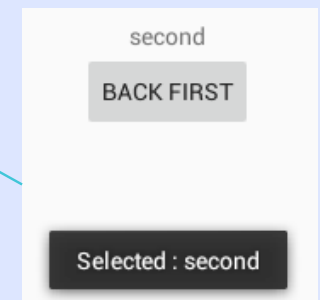
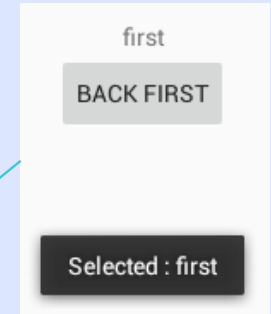
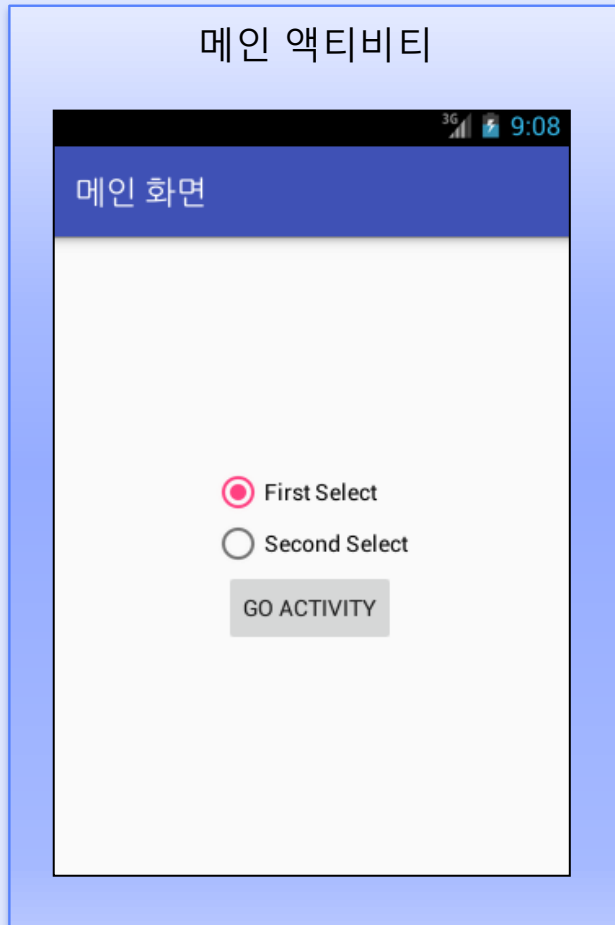
입력된 수의 합은
25

FINISH

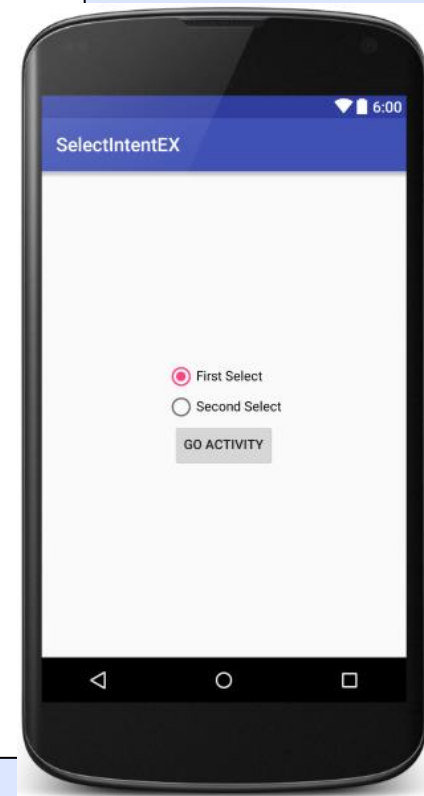
연습 문제



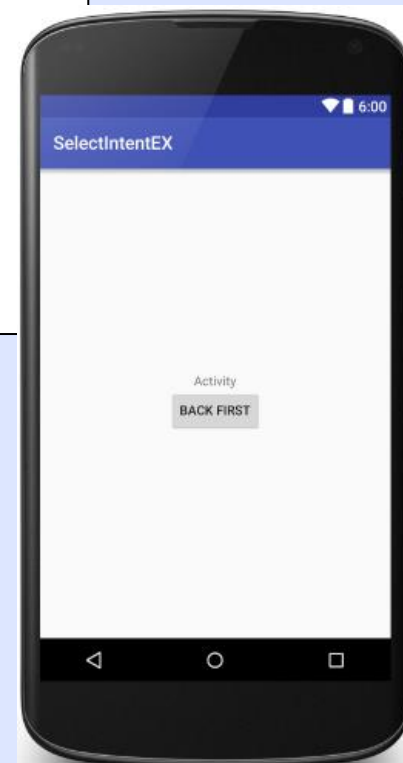
프로젝트 명: SelectIntentEx



```
activity_main.xml x
1  <?xml version="1.0" encoding="utf-8"?>
2  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      android:layout_width="match_parent"
4      android:layout_height="match_parent"
5      android:gravity="center"
6      android:orientation="vertical">
7      <RadioGroup
8          android:id="@+id/radioGroup"
9          android:layout_width="wrap_content"
10         android:layout_height="wrap_content"
11         android:text="Hello World!">
12         <RadioButton
13             android:id="@+id/radioSecond"
14             android:layout_width="wrap_content"
15             android:layout_height="wrap_content"
16             android:checked="true"
17             android:text="First Select" />
18         <RadioButton
19             android:id="@+id/radioThird"
20             android:layout_width="wrap_content"
21             android:layout_height="wrap_content"
22             android:text="Second Select" />
23     </RadioGroup>
24     <Button
25         android:id="@+id/btn"
26         android:layout_width="wrap_content"
27         android:layout_height="wrap_content"
28         android:text="GO Activity" />
29 </LinearLayout>
```





```
activity_second.xml x
1  <?xml version="1.0" encoding="utf-8"?>
2  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      android:layout_width="match_parent"
4      android:layout_height="match_parent"
5      android:gravity="center"
6      android:orientation="vertical">
7
8      <TextView
9          android:id="@+id/txtview"
10         android:layout_width="wrap_content"
11         android:layout_height="wrap_content"
12         android:text="Activity" />
13
14     <Button
15         android:id="@+id/secondbtn"
16         android:layout_width="wrap_content"
17         android:layout_height="wrap_content"
18         android:text="back first" />
19 </LinearLayout>
```



```
1 package com.example.admin.selectintentex;
2
3 import ...
9
10 public class MainActivity extends AppCompatActivity {
11
12     RadioButton radioBtnSecond;
13     Button btnFirst;
14     Intent intent;
15
16     @Override
17     protected void onCreate(Bundle savedInstanceState) {
18         super.onCreate(savedInstanceState);
19         setContentView(R.layout.activity_main);
20
21         setTitle("메인 화면");
22         btnFirst = (Button) findViewById(R.id.btn);
23         radioBtnSecond = (RadioButton) findViewById(R.id.radioSecond);
24
25         btnFirst.setOnClickListener(new View.OnClickListener() {
26             @Override
27             public void onClick(View v) {
28
29                 intent = new Intent(getApplicationContext(),
30                     SecondActivity.class);
31
32                 if (radioBtnSecond.isChecked()) {
33                     intent.putExtra("Check", "first");
34                 }
35                 else {
36                     intent.putExtra("Check", "second");
37                 }
38                 startActivity(intent);
39             }
40         });
41     }
42 }
```

```
1 package com.example.admin.selectintentex;
2
3 import ...
4
10
11 public class SecondActivity extends AppCompatActivity {
12
13     @Override
14     protected void onCreate(Bundle savedInstanceState) {
15         super.onCreate(savedInstanceState);
16         setContentView(R.layout.activity_second);
17
18         setTitle("선택한 옵션");
19
20         TextView textView = (TextView)findViewById(R.id.txtview);
21         Button SelectBtn = (Button)findViewById(R.id.secondbtn);
22
23         Intent inIntent = getIntent();
24         String SelectData = inIntent.getStringExtra("Check");
25
26         textView.setText(SelectData);
27
28         Toast.makeText(getApplicationContext(),
29             "Selected : " + SelectData, Toast.LENGTH_SHORT).show();
30
31         SelectBtn.setOnClickListener(new View.OnClickListener() {
32             @Override
33             public void onClick(View v) {
34                 finish();
35             }
36         });
37     }
38 }
```

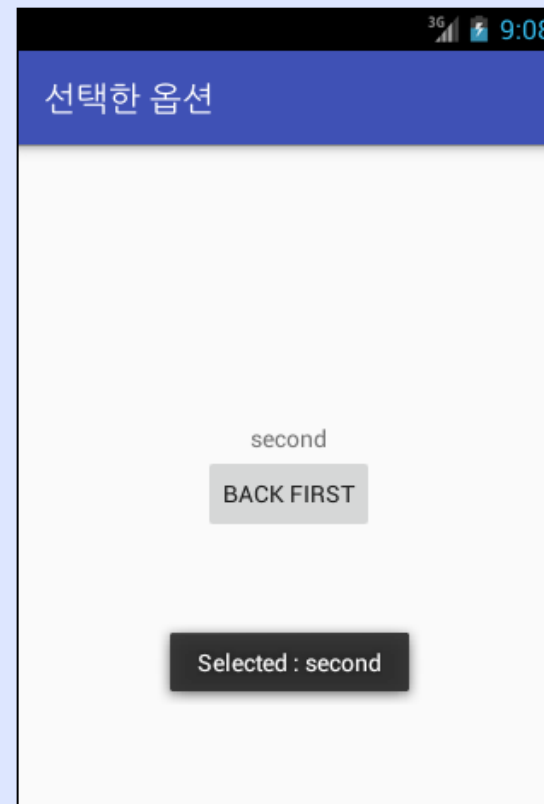
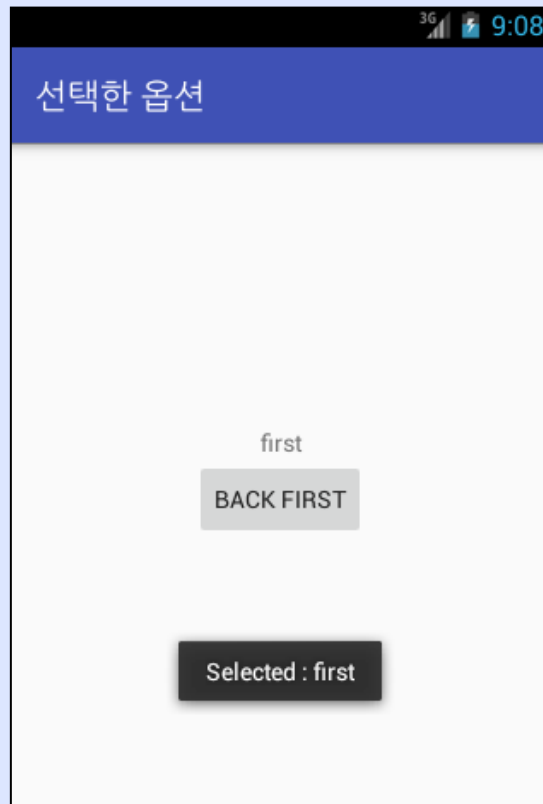
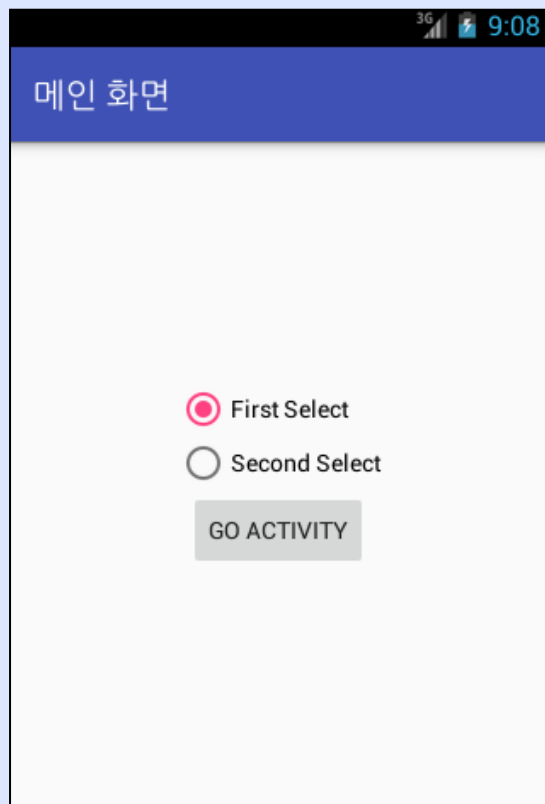


```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.admin.selectintentex">

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="SelectIntentEX"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".MainActivity">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

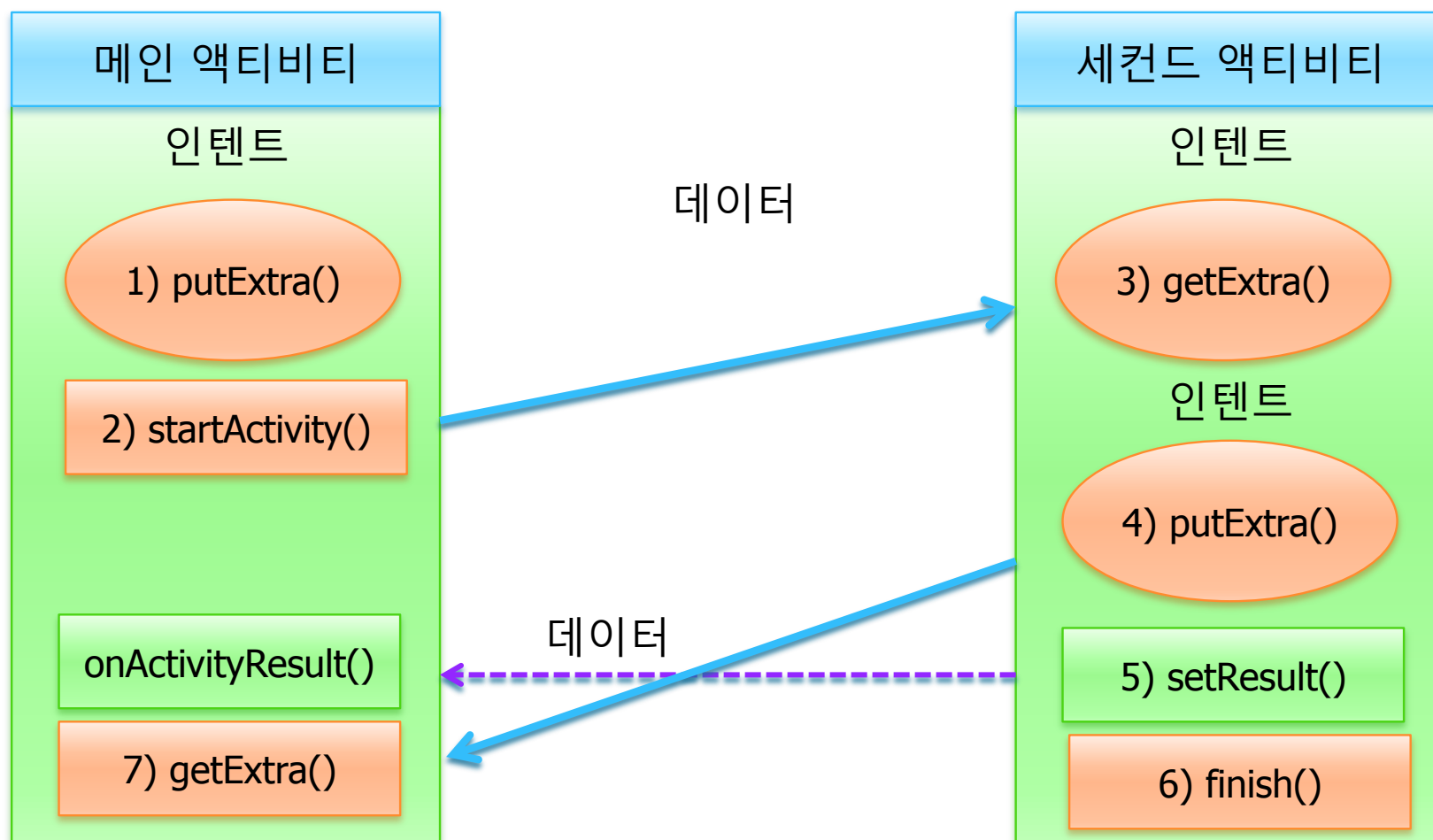
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
        <activity android:name=".SecondActivity"></activity>
    </application>

</manifest>
```



Activity Data 전송 - 둘

- 메인 액티비티에서 세컨드 액티비티로 데이터 전송하고 세컨드 액티비티에서 메인 액티비티로 데이터 전송(양방향)



프로젝트 생성



Application name: `SendReceiveIntent`

Company Domain: `admid.example.com`

Project location: `C:\Android\StdWork\SendReceiveIntent`

Target Android Devices

- `Phone and Tabet`
- `Minimun SDK API 15 : Android 4.0.3`

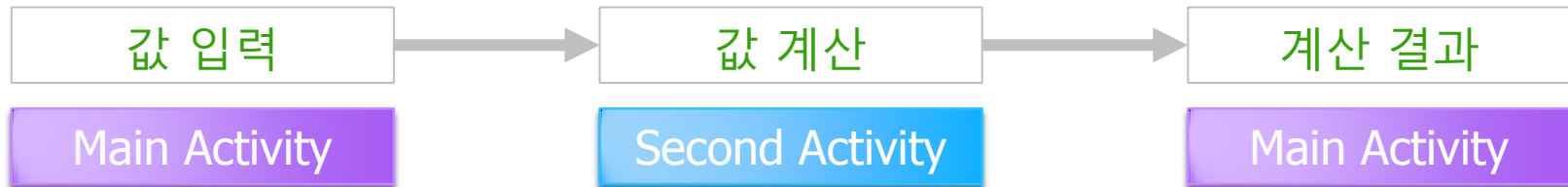
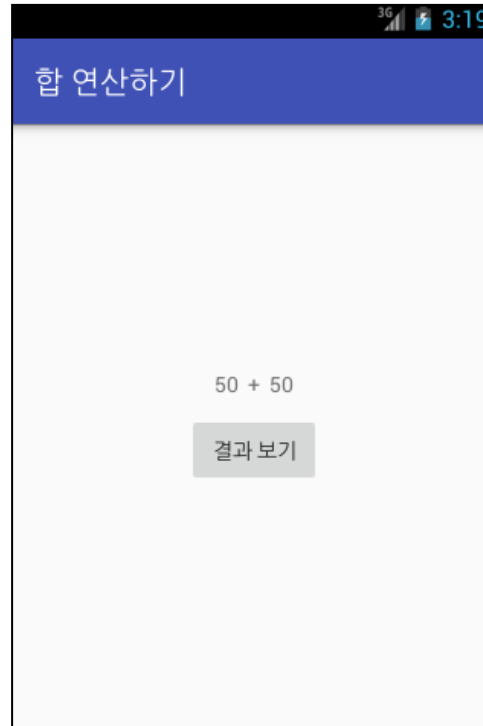
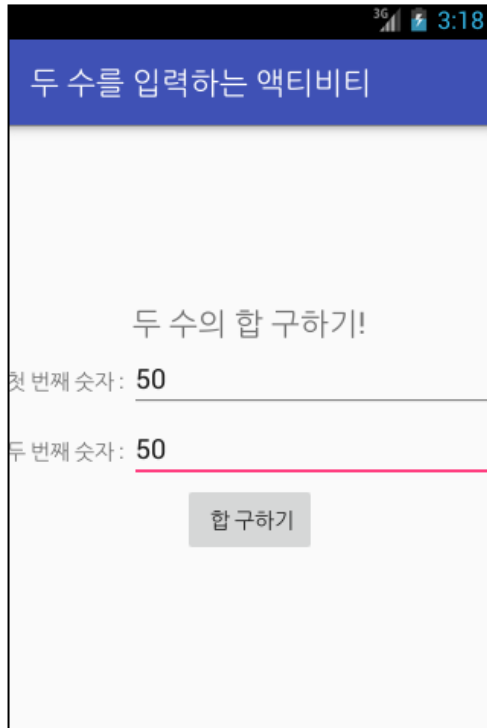
Add an activity to Mobile : `Empty Activity`

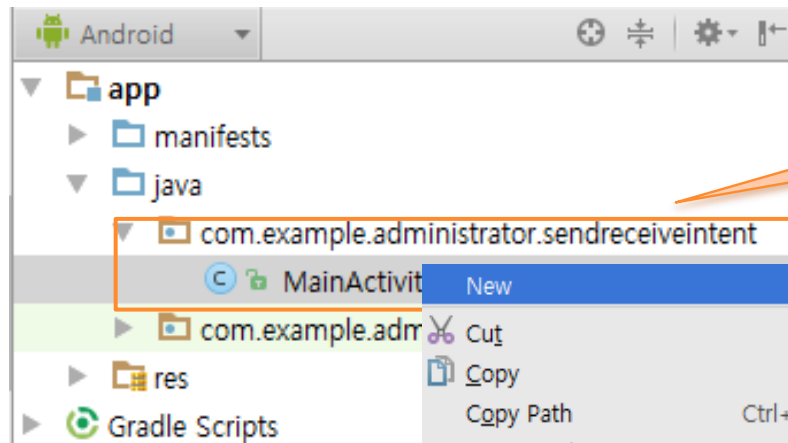
Customize the Activity

Activity Name: `MainActivity`

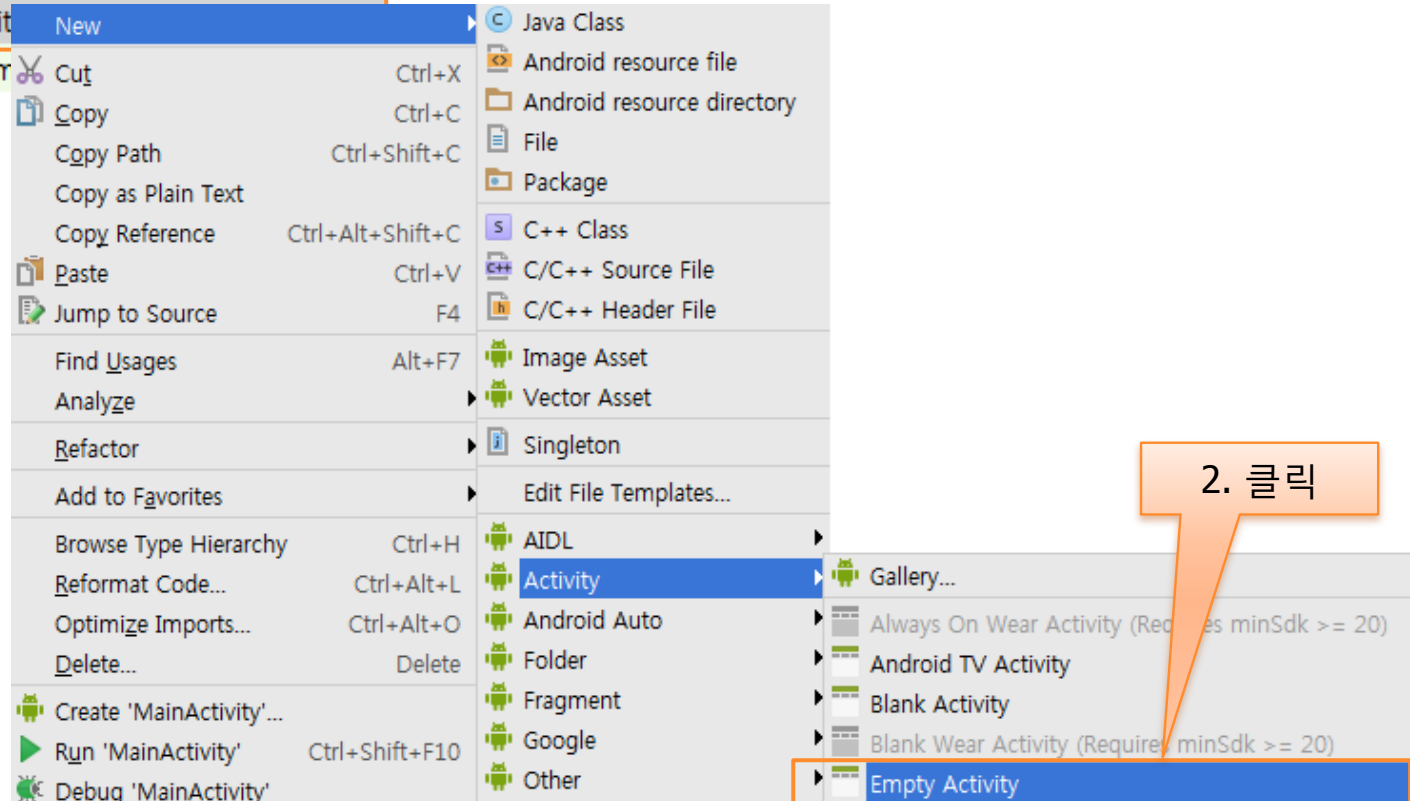
Layout Name: `activity_main`





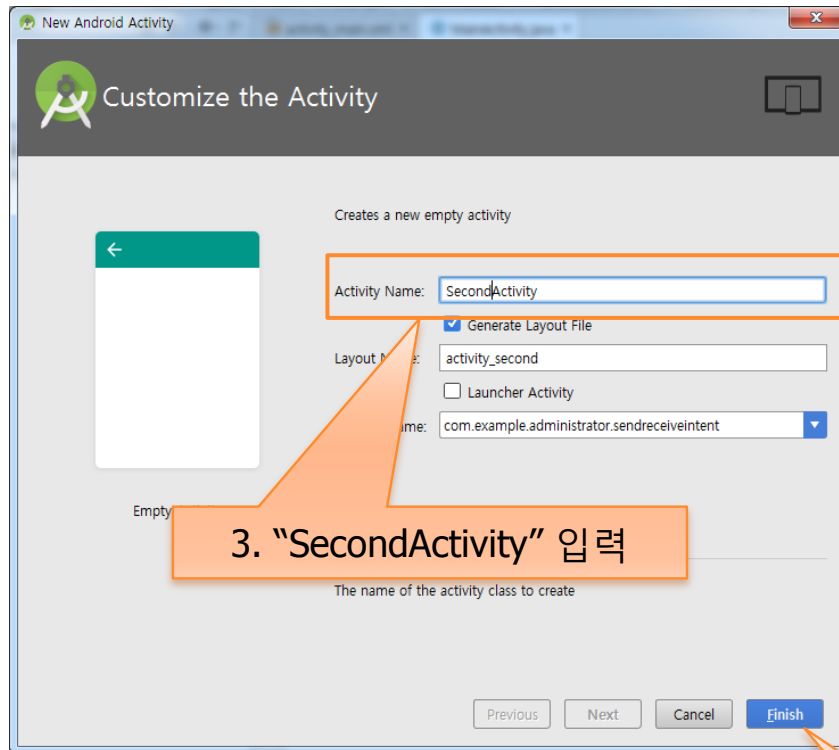


1. 오른쪽 마우스 클릭



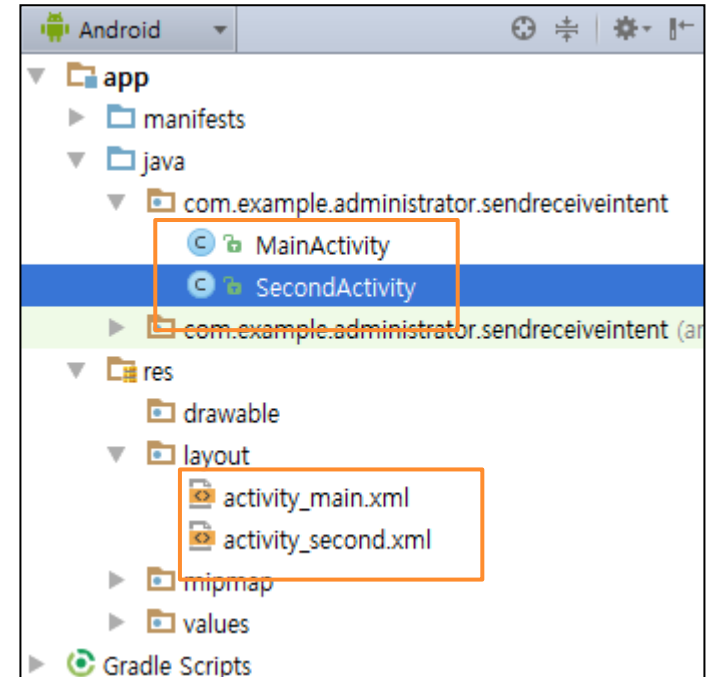
2. 클릭

Activity 및 Layout 추가 확인



3. "SecondActivity" 입력

4. 클릭



5. 코딩

```
1  <?xml version="1.0" encoding="utf-8"?>
2  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      android:layout_width="match_parent"
4      android:layout_height="match_parent"
5      android:gravity="center"
6      android:orientation="vertical">
7      <TextView
8          android:layout_width="wrap_content"
9          android:layout_height="wrap_content"
10         android:textSize="20dp"
11         android:text="두 수의 합 구하기!" />
12     <LinearLayout
13         android:layout_width="match_parent"
14         android:layout_height="wrap_content"
15         android:orientation="horizontal">
16         <TextView
17             android:layout_width="wrap_content"
18             android:layout_height="wrap_content"
19             android:text="첫 번째 숫자 : " />
20         <EditText
21             android:id="@+id/edtFirst"
22             android:layout_width="match_parent"
23             android:layout_height="wrap_content"
24             android:hint="숫자 입력" />
25     </LinearLayout>
26
```



```
activity_main.xml x
26
27 <LinearLayout
28     android:layout_width="match_parent"
29     android:layout_height="wrap_content"
30     android:orientation="horizontal">
31     <TextView
32         android:layout_width="wrap_content"
33         android:layout_height="wrap_content"
34         android:text="두 번째 숫자 : " />
35     <EditText
36         android:id="@+id/edtSecond"
37         android:layout_width="match_parent"
38         android:layout_height="wrap_content"
39         android:hint="숫자 입력" />
40 </LinearLayout>
41 <Button
42     android:id="@+id/hapbtn"
43     android:layout_width="wrap_content"
44     android:layout_height="wrap_content"
45     android:text=" 합 구하기" />
46 </LinearLayout>
```

6. 코딩



7. 코딩

```
1  <?xml version="1.0" encoding="utf-8"?>
2  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      android:layout_width="match_parent"
4      android:layout_height="match_parent"
5      android:gravity="center"
6      android:orientation="vertical">
7      <LinearLayout
8          android:layout_width="match_parent"
9          android:layout_height="wrap_content"
10         android:gravity="center"
11         android:orientation="horizontal">
12         <TextView
13             android:id="@+id/firstNum"
14             android:layout_width="wrap_content"
15             android:layout_height="wrap_content"
16             android:text="첫 번째 수" />
17         <TextView
18             android:layout_width="wrap_content"
19             android:layout_height="wrap_content"
20             android:text=" + " />
21         <TextView
22             android:id="@+id/secondNum"
23             android:layout_width="wrap_content"
24             android:layout_height="wrap_content"
25             android:text="두 번째 수" />
26     </LinearLayout>
27     <Button
28         android:id="@+id/RusultBtn"
29         android:layout_width="wrap_content"
30         android:layout_height="wrap_content"
31         android:layout_marginTop="10dp"
32         android:text="결과 보기" />
33 </LinearLayout>
```



8. 코딩

```
1 package com.example.administrator.sendreceiveintent;
2
3 import ...
4
5
6
7
8
9
10 public class MainActivity extends AppCompatActivity {
11
12     EditText editTextFirst, editTextSecond;
13     Button hapBtn;
14
15     @Override
16     protected void onCreate(Bundle savedInstanceState) {
17         super.onCreate(savedInstanceState);
18         setContentView(R.layout.activity_main);
19
20         setTitle("두 수를 입력하는 액티비티");
21
22         editTextFirst = (EditText) findViewById(R.id.edtFirst);
23         editTextSecond = (EditText) findViewById(R.id.edtSecond);
24         hapBtn = (Button) findViewById(R.id.hapbtn);
25     }
26 }
```

9. 코딩

```
25
26 editTextFirst.setText("0");
27 editTextSecond.setText("0");
28
29 hapBtn.setOnClickListener(new View.OnClickListener() {
30     @Override
31     public void onClick(View v) {
32         Intent intent = new Intent(getApplicationContext(),
33             SecondActivity.class);
34         intent.putExtra("Num1", editTextFirst.getText().toString());
35         intent.putExtra("Num2", editTextSecond.getText().toString());
36         startActivityForResult(intent,0);
37     }
38 });
39
40 }
41 }
```

- 인텐트로 "Num1"과 "Num2"를 전송
- 결과 값은 다시 받기 위해서는 startActivityForResult()를 써야 함.

10. Line 14 클릭 후 오른쑈고 마우스 클릭

```

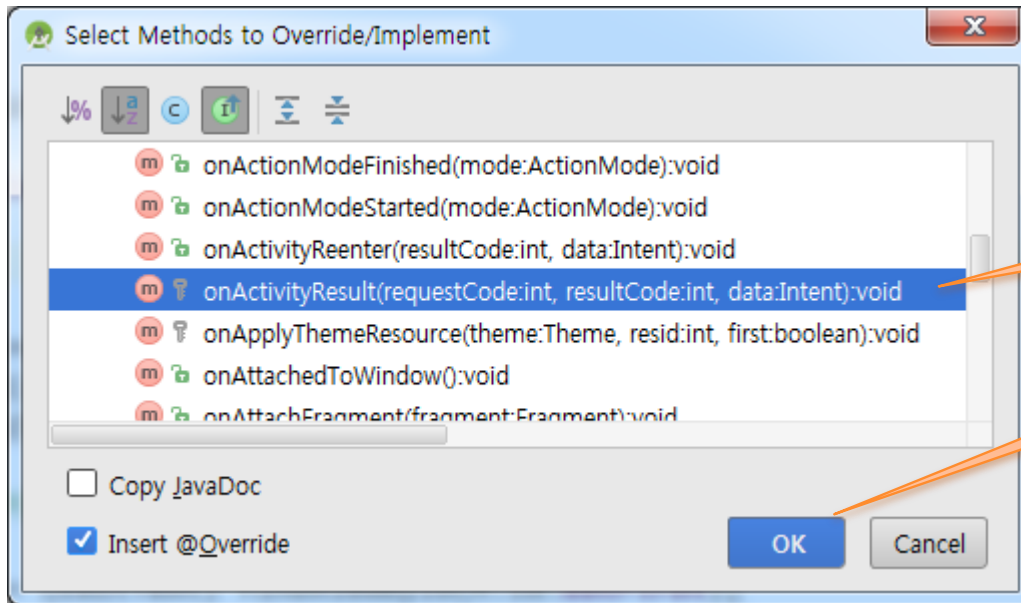
2
3 import ...
9
10 public class MainActivity extends AppCompatActivity {
11
12     EditText editTextFirst, editTextSecond;
13     Button btn;
14
15     @Override
16     protected void onCreate(Bundle savedInstanceState) {
17         super.onCreate(savedInstanceState);
18         setContentView(R.layout.activity_main);
    
```

11. 클릭

- Copy Reference Ctrl+Alt+Shift+C
- Paste Ctrl+V
- Paste from History... Ctrl+Shift+V
- Paste Simple Ctrl+Alt+Shift+V
- Column Selection Mode Alt+Shift+Insert
- Find Usages Alt+F7
- Analyze
- Refactor
- Folding
- Go To
- Generate... Alt+Insert**
- Create 'MainActivity'...
- Run 'MainActivity' Ctrl+Shift+F10
- Debug 'MainActivity'
- Local History
- Compare with Clipboard
- File Encoding
- Create Gist...

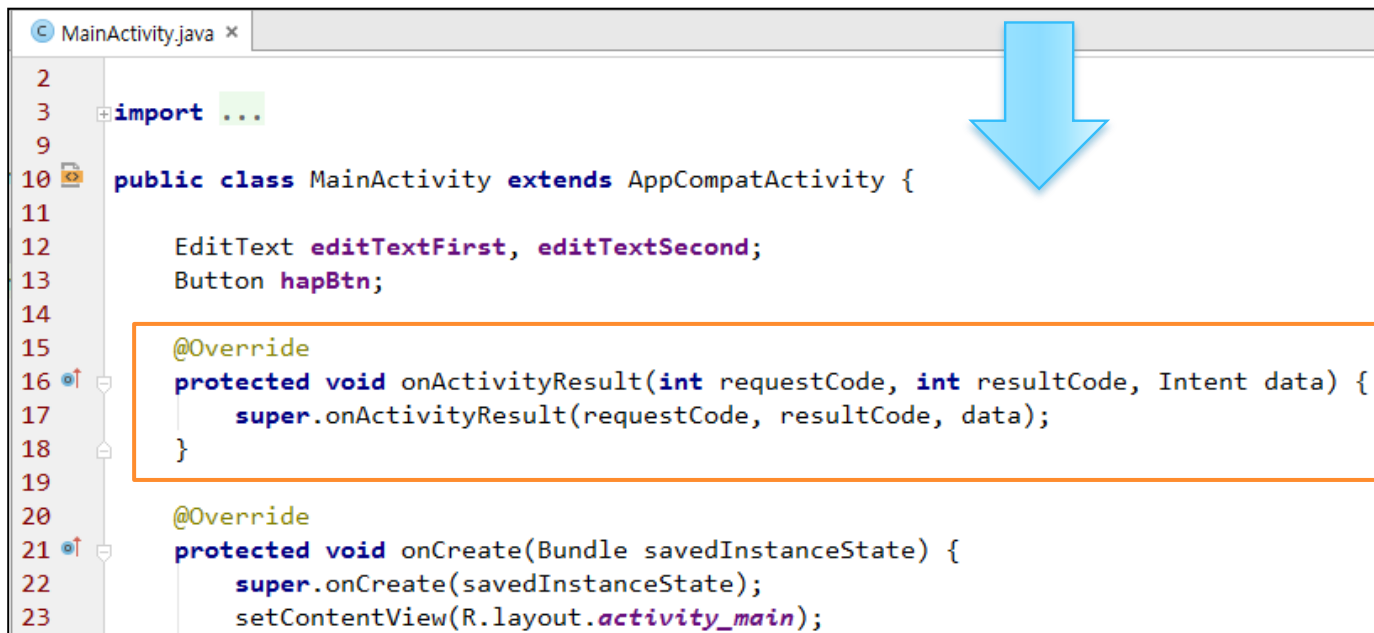
12. 클릭

- Generate
 - Constructor
 - Getter
 - Setter
 - Getter and Setter
 - equals() and hashCode()
 - toString()
 - Override Methods...**
 - Delegate Methods...
 - Super Method Call
 - Copyright
 - App Indexing API Code



13. "onActivityResult(...)" 선택

14. 클릭



15. 추가 확인

```
MainActivity.java x
10
11 public class MainActivity extends AppCompatActivity {
12
13     EditText editTextFirst, editTextSecond;
14     Button hapBtn;
15
16     @Override
17     protected void onActivityResult(int requestCode, int resultCode, Intent data) {
18         super.onActivityResult(requestCode, resultCode, data);
19         if(resultCode == RESULT_OK){
20             int hap = data.getIntExtra("Hap", 0);
21             Toast.makeText(getApplicationContext(),
22                 "합계 : " + hap, Toast.LENGTH_LONG).show();
23         }
24     }
25
26     @Override
27     protected void onCreate(Bundle savedInstanceState) {
28         super.onCreate(savedInstanceState);
29         setContentView(R.layout.activity_main);
30     }
31 }
```

16. 코딩

```
SecondActivity.java x
1  package com.example.administrator.sendreceiveintent;
2
3  import ...
9
10 public class SecondActivity extends AppCompatActivity {
11     Button resultBtn;
12     TextView firstNum, secondNum;
13     int hap;
14     String FirstText, SecondText;
15
16     @Override
17     protected void onCreate(Bundle savedInstanceState) {
18         super.onCreate(savedInstanceState);
19         setContentView(R.layout.activity_second);
20
21         setTitle("합 연산하기");
22
23         resultBtn = (Button) findViewById(R.id.resultBtn);
24         firstNum = (TextView) findViewById(R.id.firstNum);
25         secondNum = (TextView) findViewById(R.id.secondNum);
26
```

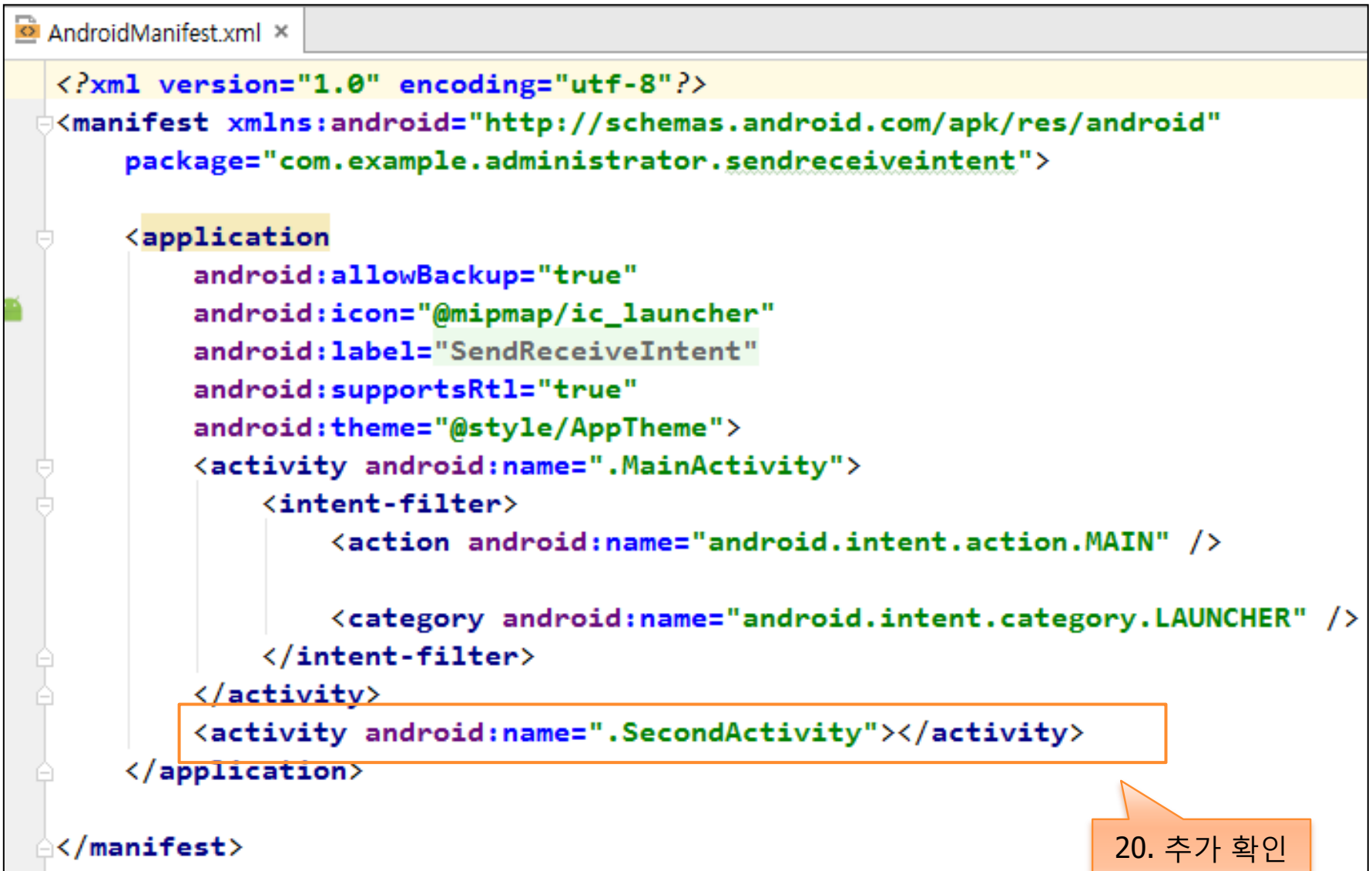
17. 코딩

18. 코딩

```
26
27 Intent inIntent = getIntent();
28 FirstText = inIntent.getStringExtra("Num1");
29 SecondText = inIntent.getStringExtra("Num2");
30
31 firstNum.setText(FirstText);
32 secondNum.setText(SecondText);
33
34 resultBtn.setOnClickListener(new View.OnClickListener() {
35     @Override
36     public void onClick(View v) {
37         hap = Integer.parseInt(FirstText) + Integer.parseInt(SecondText);
38         Intent outIntent = new Intent(getApplicationContext(),
39             MainActivity.class);
40         outIntent.putExtra("Hap", hap);
41         setResult(RESULT_OK, outIntent);
42         finish();
43     }
44 });
45
46 }
```

hap 을 "Hap" 명으로 전달

메인 액티비티로 돌아가며
onActivityResult() 메소드가 실행



```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.administrator.sendreceiveintent">

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="SendReceiveIntent"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".MainActivity">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
        <activity android:name=".SecondActivity"></activity>
    </application>

</manifest>
```

20. 추가 확인

3G 3:18

두 수를 입력하는 액티비티

두 수의 합 구하기!

첫 번째 숫자: 50

두 번째 숫자: 50

합 구하기

3G 3:19

합 연산하기

50 + 50

결과 보기

3G 3:19

두 수를 입력하는 액티비티

두 수의 합 구하기!

첫 번째 숫자: 50

두 번째 숫자: 50

합 구하기

합계: 100

값 입력

값 계산

계산 결과