



액티비티와 인텐트

1. 액티비티와 인텐트



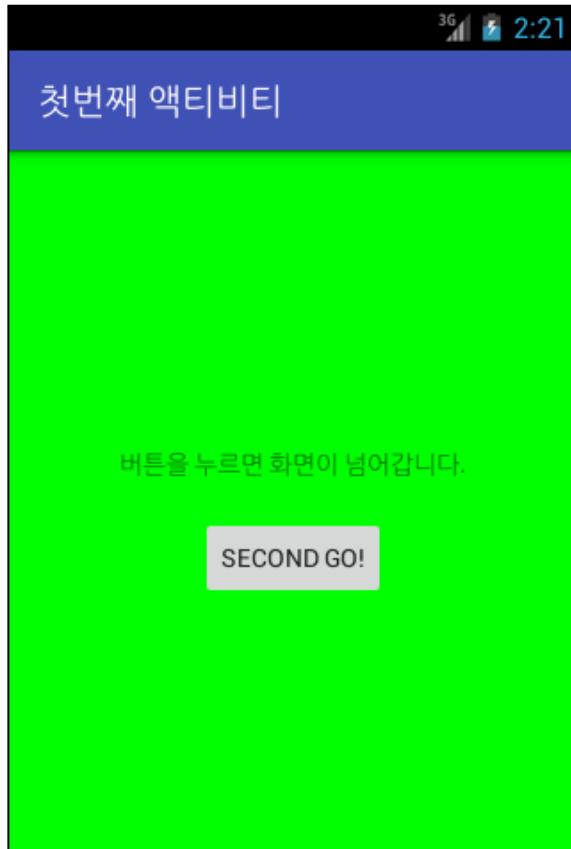
❖ 액티비티

- ✓ 액티비티 하나당 화면을 하나씩 생성할 수 있는데, 일반적으로 **액티비티 하나당 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 ~~~~~
```



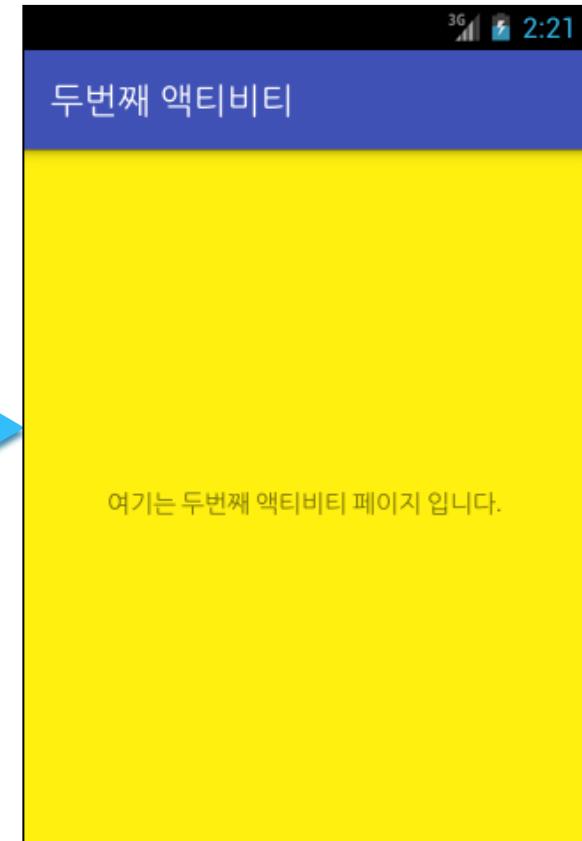
Intent 구조



Manifest.xml

```
<activity
    android:name=
        ".MainActivity">

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



액티비티와 인텐트- 화면전환



Application name: IntentBase

Company Domain: admid.example.com

Project location: C:\Android\StdWork\InnerClassBtn

Target Android Devices

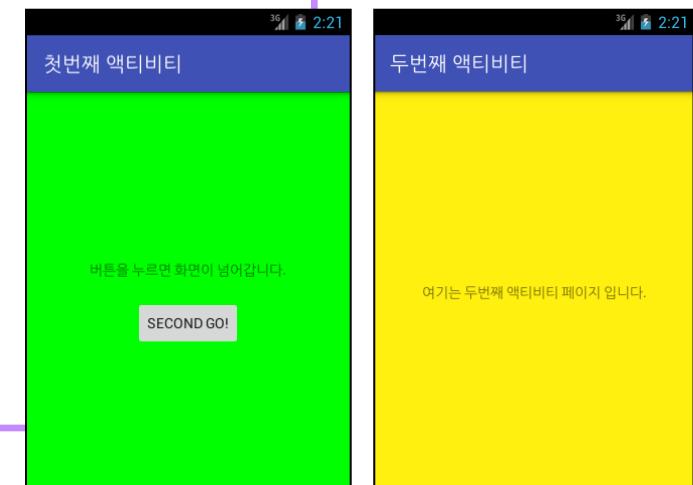
- Phone and Tabet
- Minimun SDK API 15 : Android 4.0.3

Add an activity to Mobile : Empty Activity

Customize the Activity

Activity Name: MainActivity

Layout Name: activity_main



activity_main.xml

```
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>
```

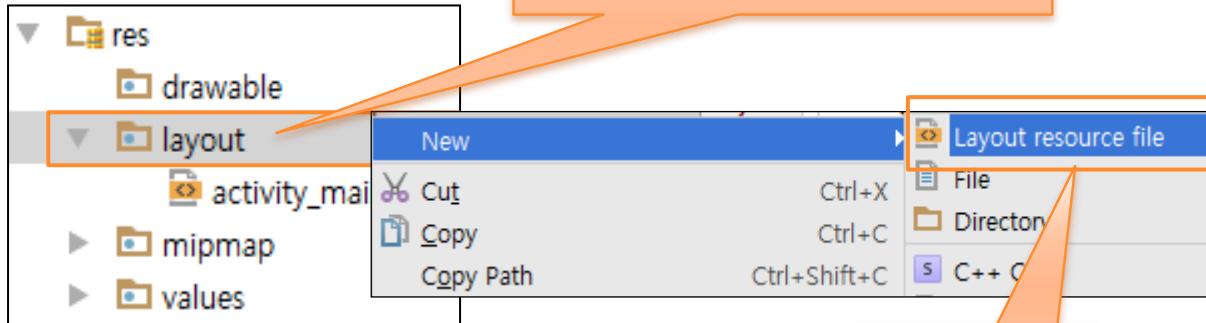
1. 코딩



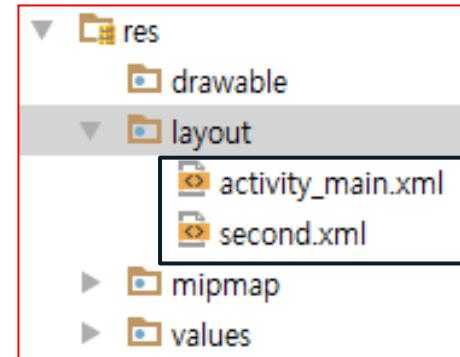
Layout 파일 복사

6

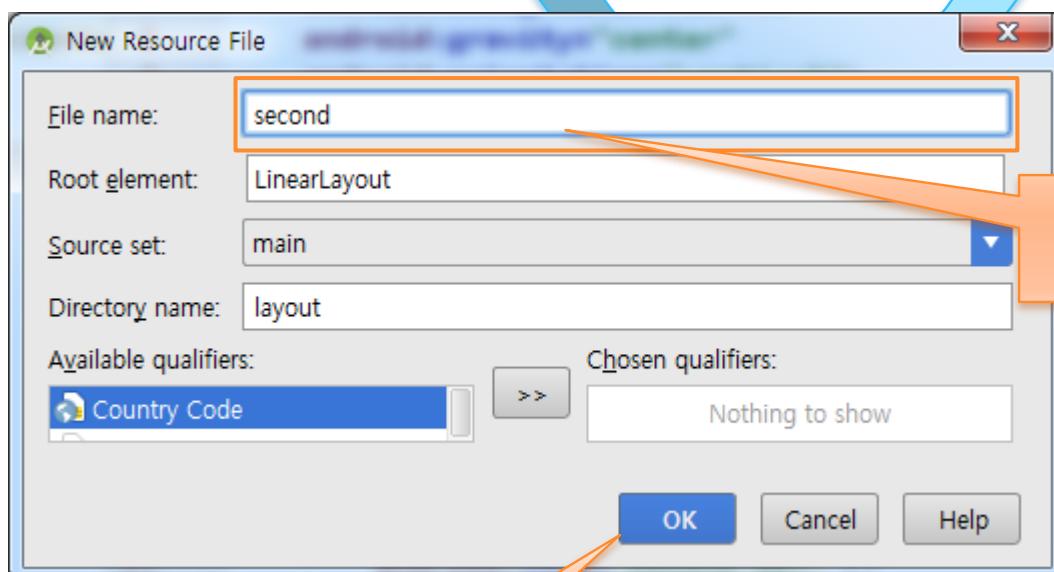
2. 오른쪽 마우스 클릭



3. 클릭



4. "second" 입력



5. 클릭

second.xml 화면 설계

7

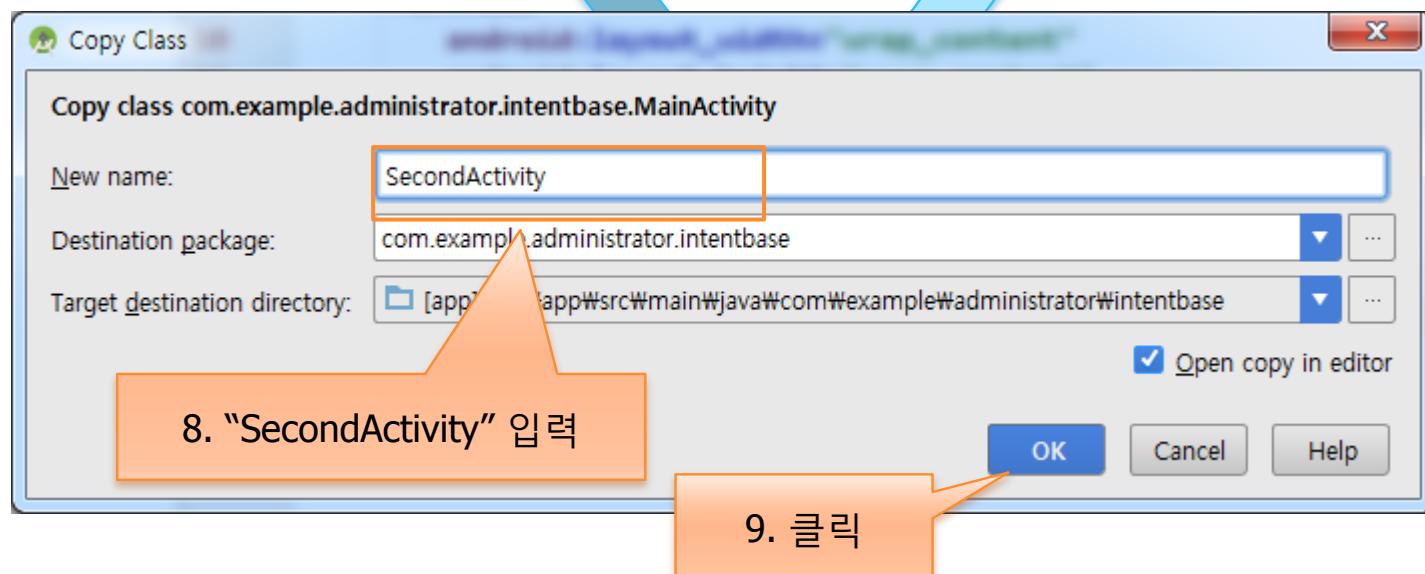
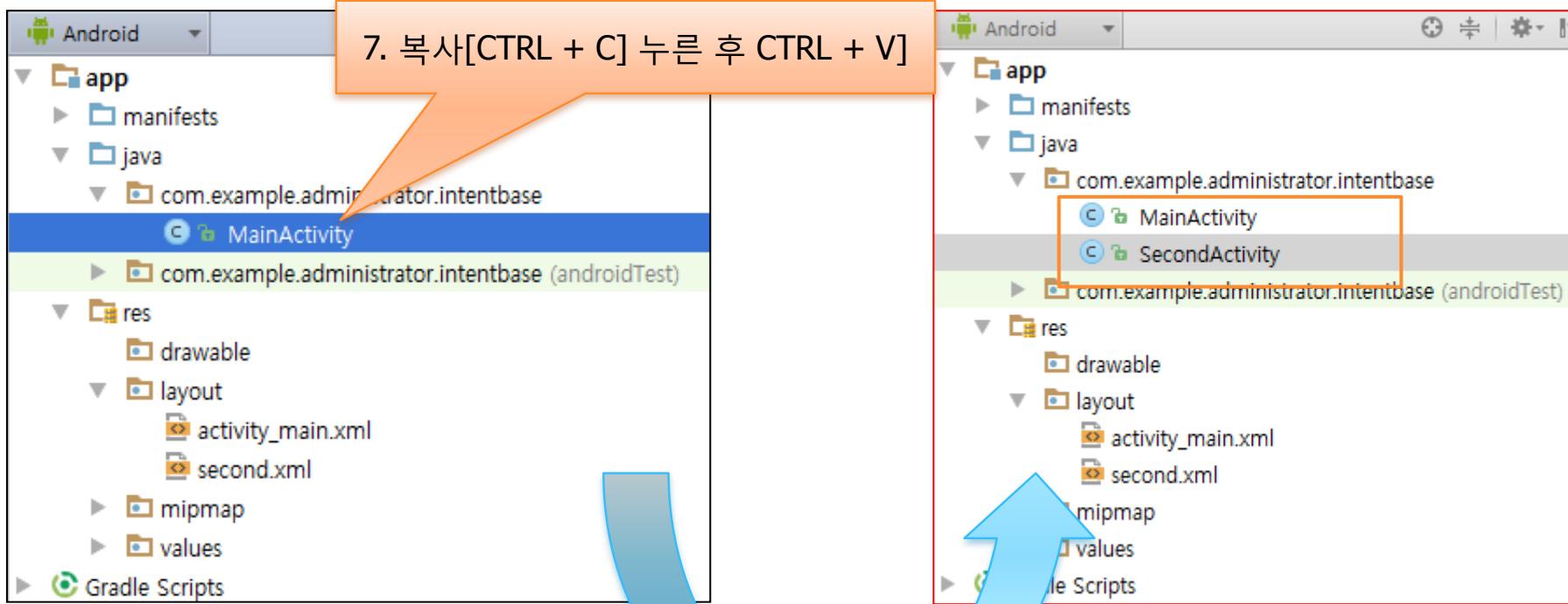
second.xml x

```
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 </LinearLayout>
```

6. 코딩



액티비티 파일 생성(복사하여 수정)



MainActivity.java

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

10. 코딩

```
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 }
```

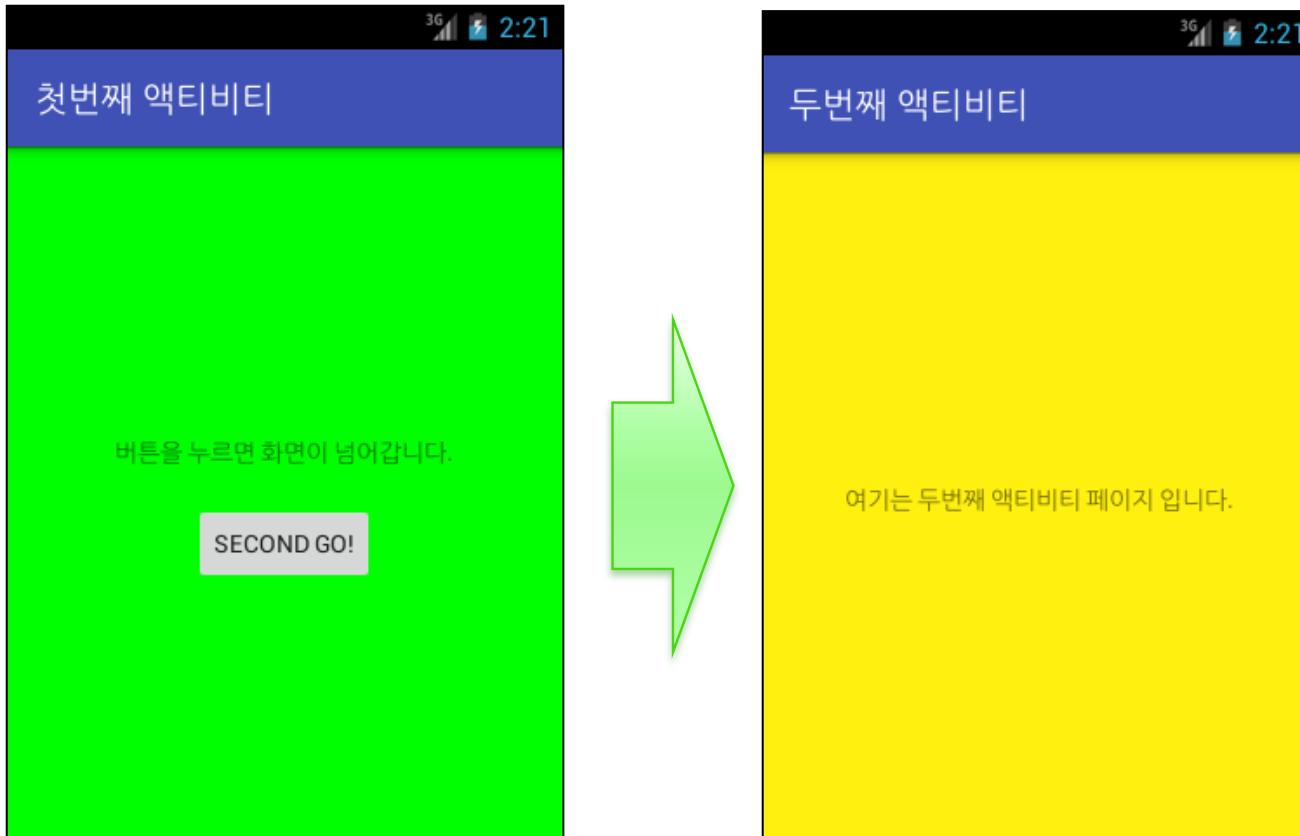
11. 코딩

```
<?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>
```

The screenshot shows the AndroidManifest.xml file in an IDE. The code defines a single application with one activity, MainActivity. This activity is set as the main launcher activity with both MAIN and LAUNCHER categories. A new activity, SecondActivity, is also declared within the application tag. An orange callout box points to the declaration of SecondActivity with the text "12. 추가". A red checkmark icon and the text "✓ 사용될 액티비티는 AndroidManifest.xml에 꼭 등록해야 한다." are at the bottom right.

✓ 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



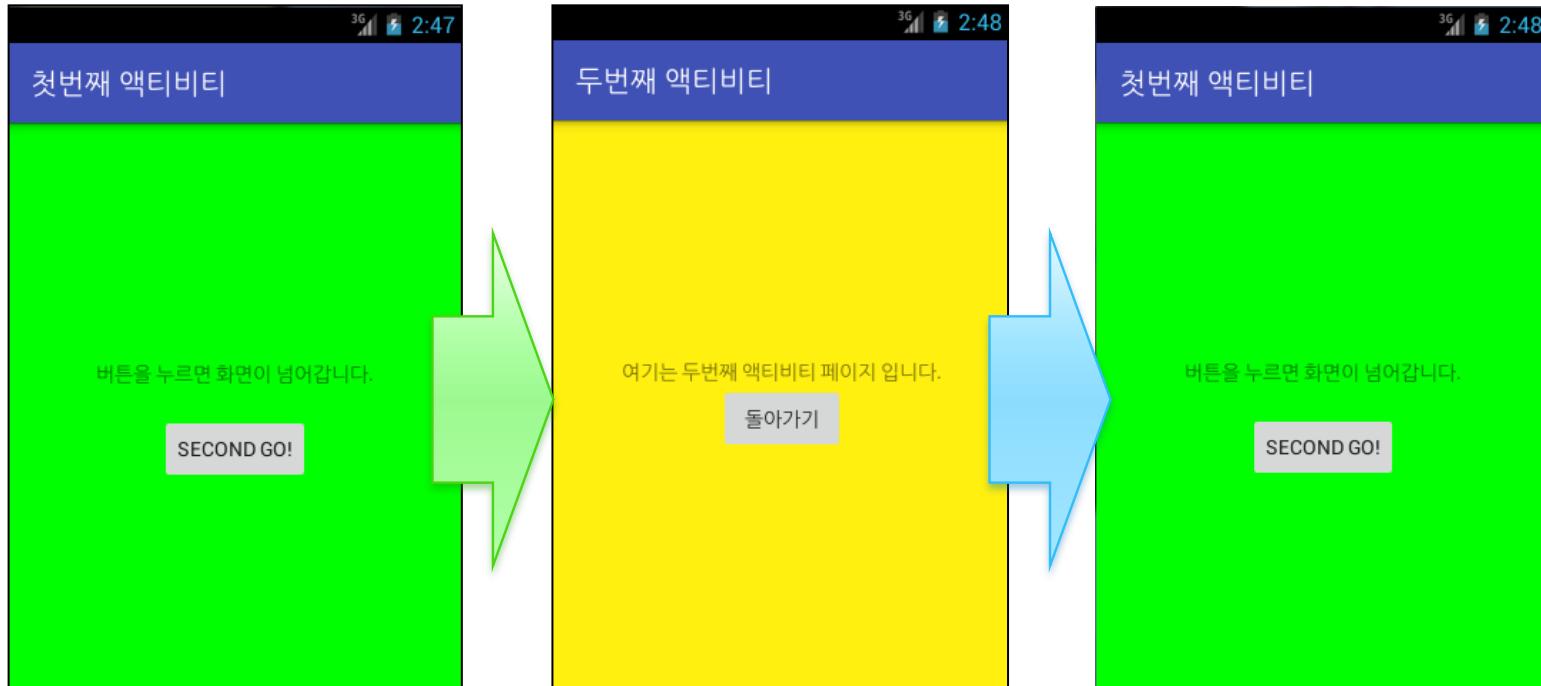
SeconActivity.java 수정

14

```
SecondActivity.java ×  
1 package com.example.administrator.intentbase;  
2  
3 import ...  
4  
5  
6 public class SecondActivity extends AppCompatActivity {  
7  
8     Button backbtn;  
9  
10    @Override  
11    protected void onCreate(Bundle savedInstanceState) {  
12        super.onCreate(savedInstanceState);  
13        setContentView(R.layout.second);  
14        setTitle("두번째 액티비티");  
15  
16        backbtn = (Button)findViewById(R.id.Backbtn);  
17  
18        backbtn.setOnClickListener(new View.OnClickListener() {  
19            @Override  
20            public void onClick(View v) {  
21                finish();  
22            }  
23        });  
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">

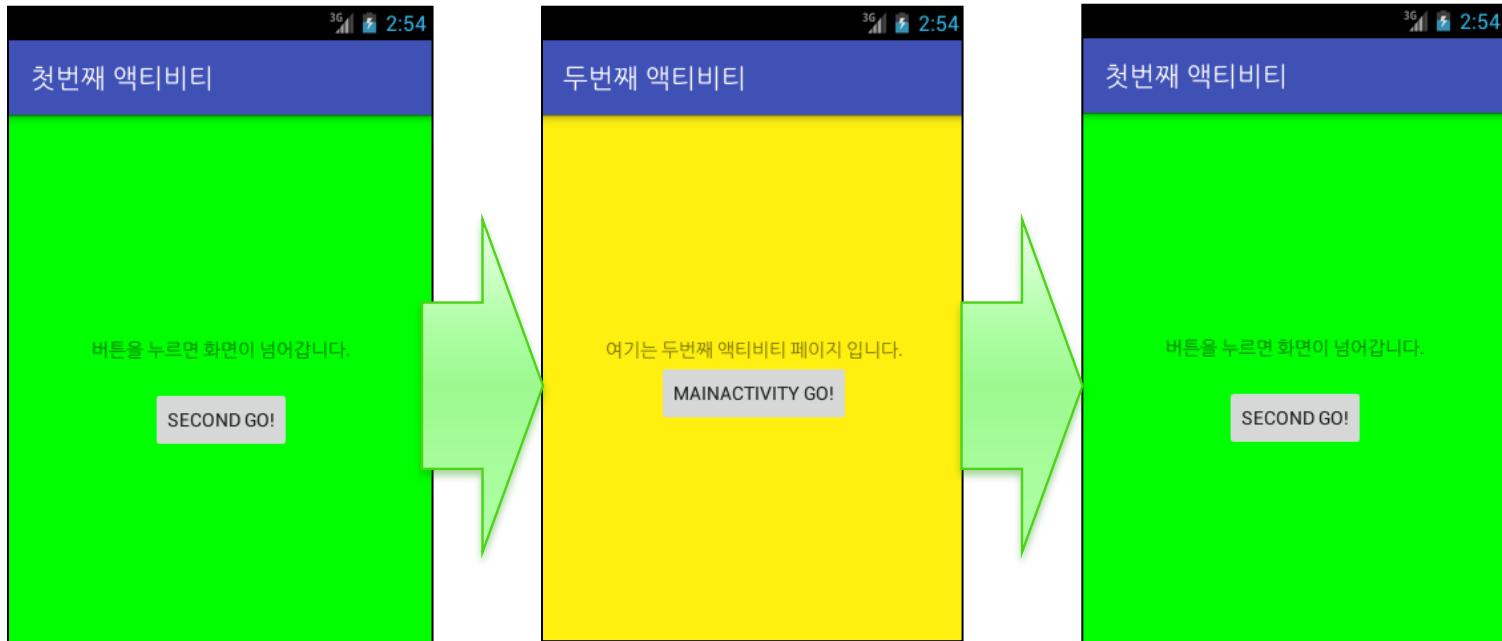
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="여기는 두번째 액티비티 페이지 입니다." />

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

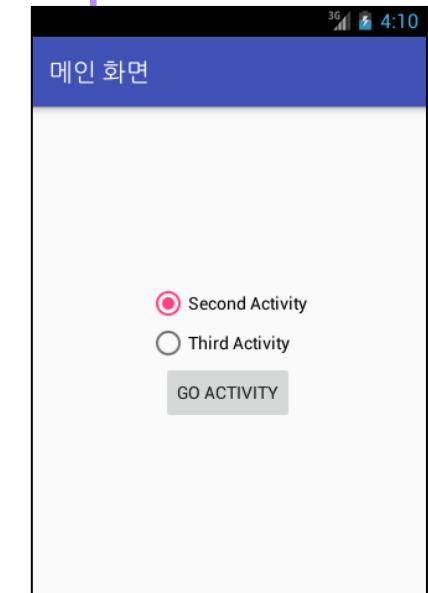
- Phone and Tabet
- Minimun SDK API 15 : Android 4.0.3

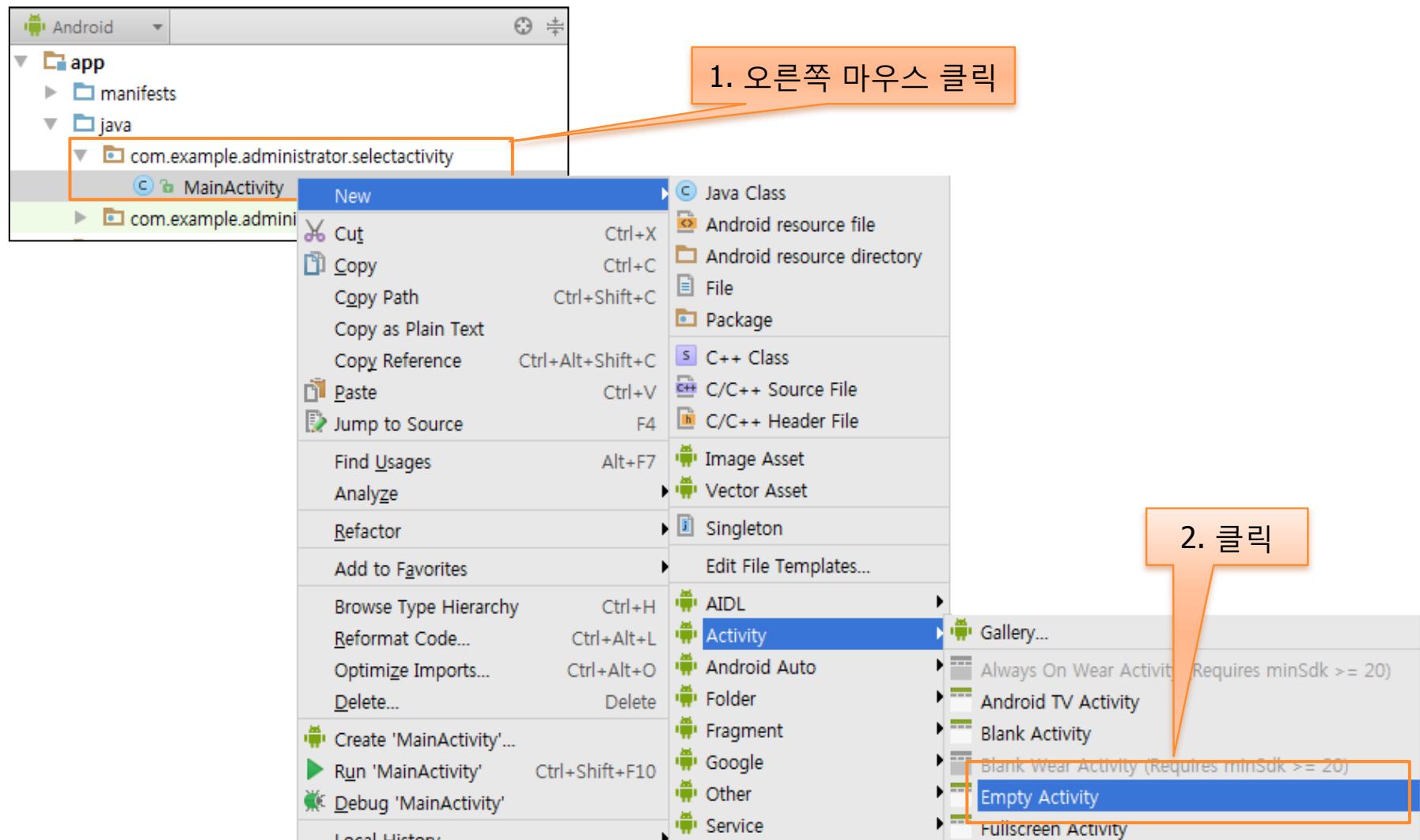
Add an activity to Mobile : **Empty Activity**

Customize the Activity

Activity Name: **MainActivity**

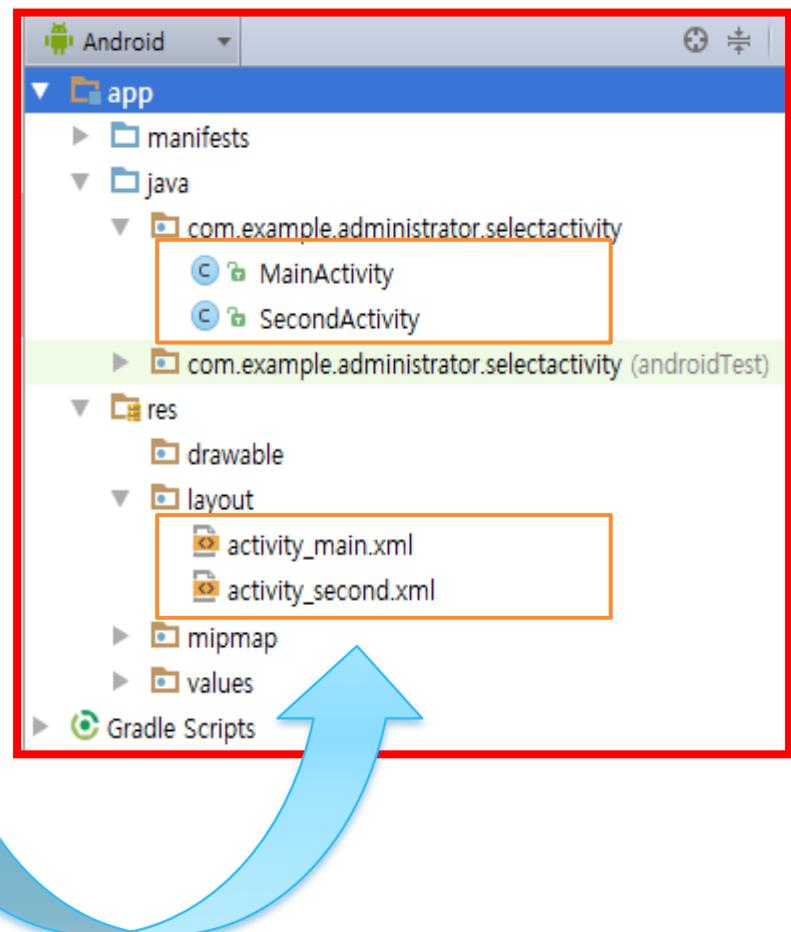
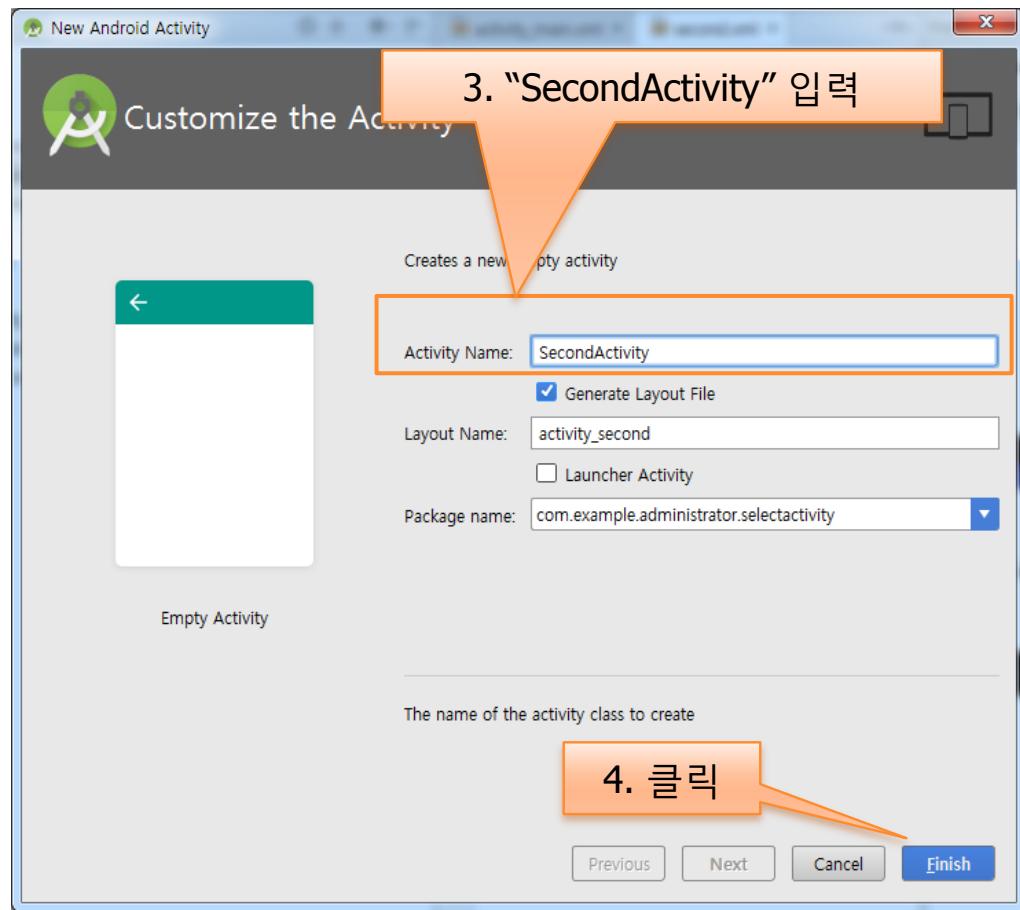
Layout Name: **activity_main**

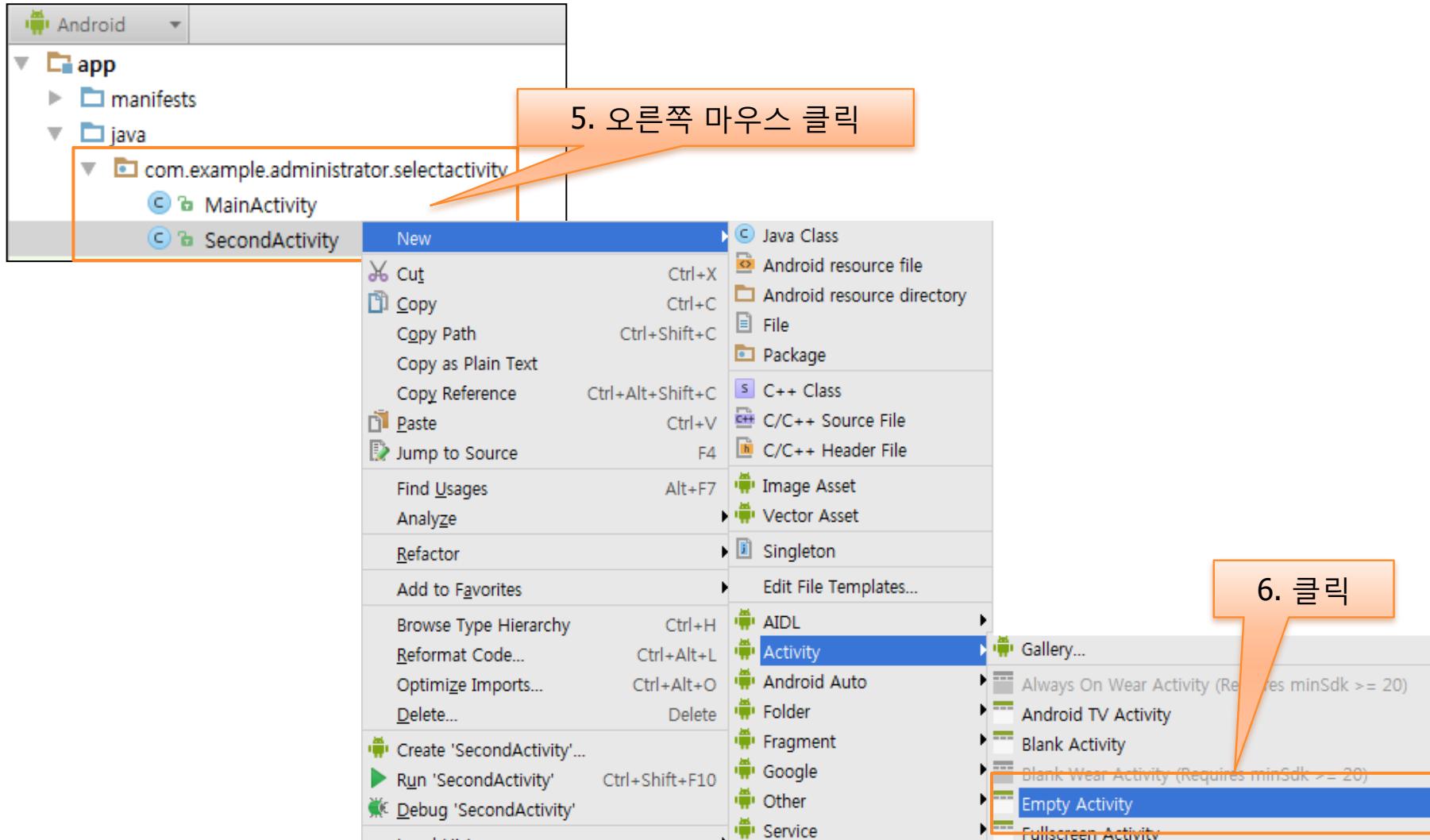


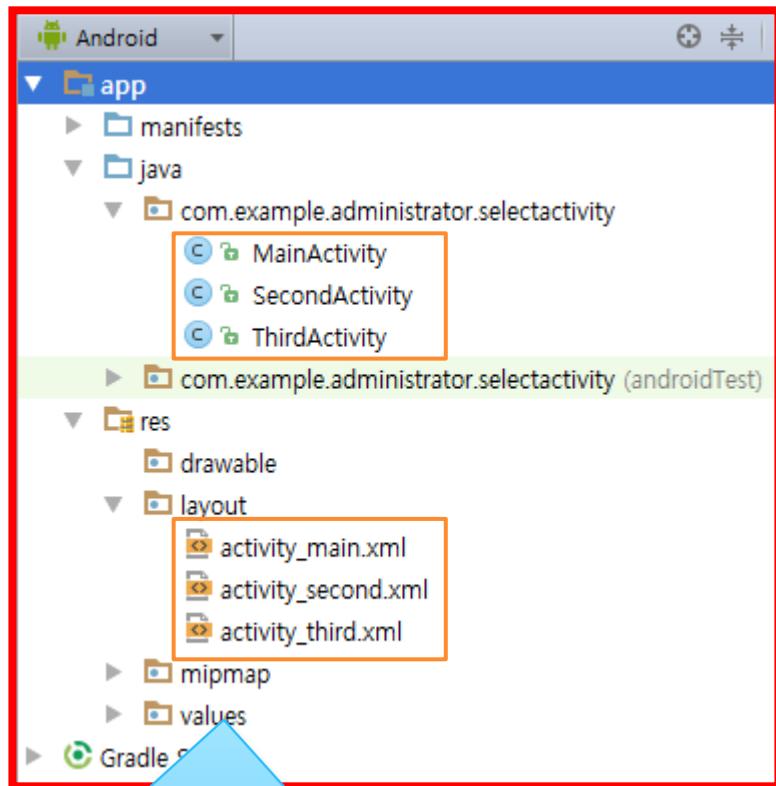
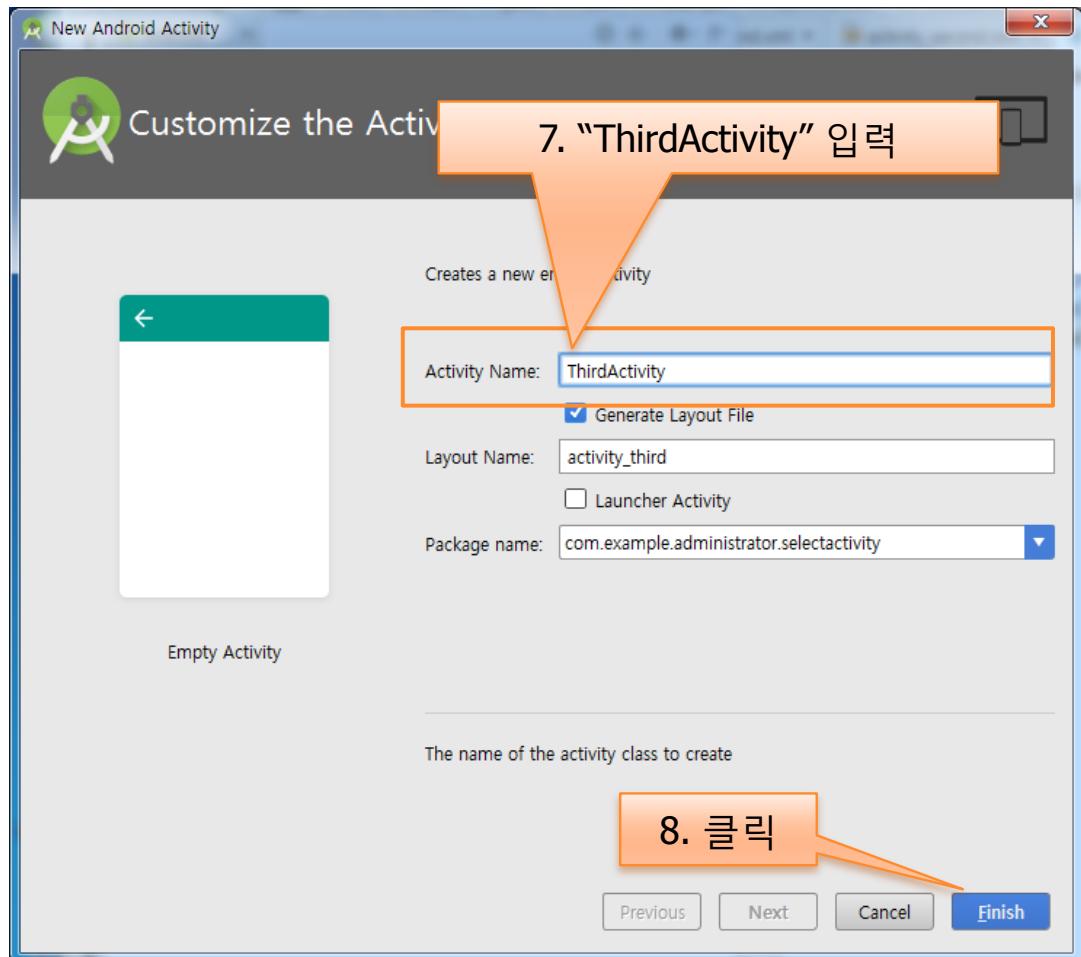


Activity 추가

21







Activity_main.xml

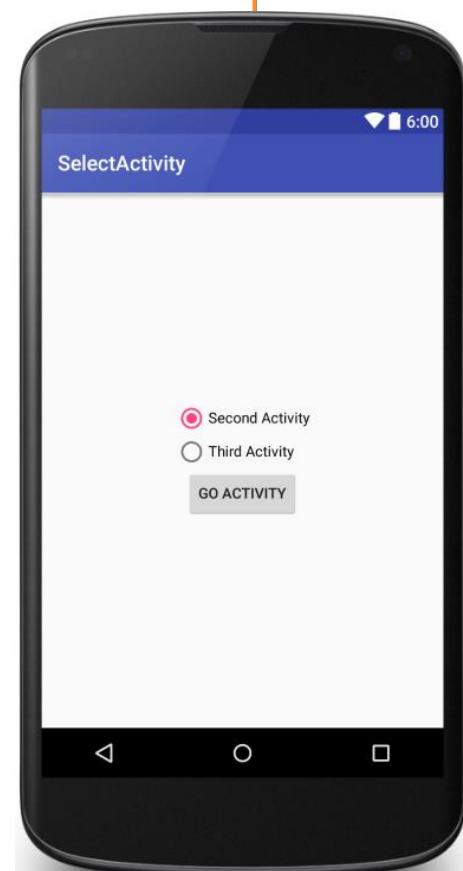
activity_main.xml *

```

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>

```

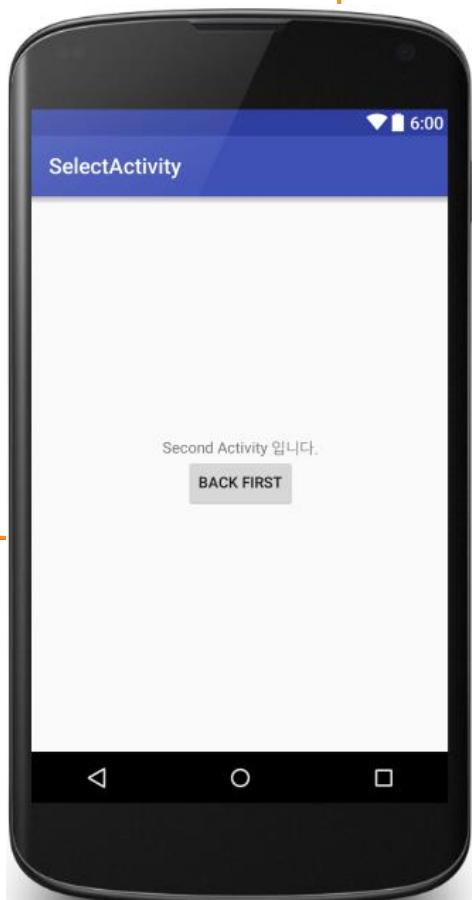
9. 코딩



activity_second.xml x

10. 코딩

```
1 <?xml version="1.0" encoding="utf-8"?>
2 ( 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>
```



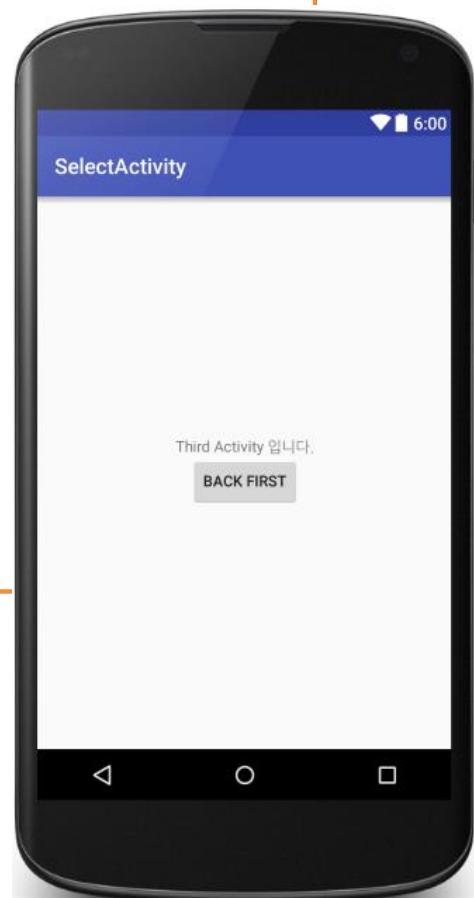
activity_third.xml x

```
<?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>
```

11. 코딩



```
c MainActivity.java x
1 package com.example.administrator.selectactivity;
2
3 import ...
4
5
6 public class MainActivity extends AppCompatActivity {
7
8     RadioButton radioBtnSecond;
9     Button btnFirst;
10    Intent intent;
11
12
13    @Override
14    protected void onCreate(Bundle savedInstanceState) {
15        super.onCreate(savedInstanceState);
16        setContentView(R.layout.activity_main);
17
18        setTitle("메인 화면");
19
20
21 }
```

12. 코딩

MainActivity.java

13. 코딩

```
20         setTitle("메인 화면");
21         btnFirst = (Button) findViewById(R.id.btn);
22         radioBtnSecond = (RadioButton)findViewById(R.id.radioSecond);
23
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 }
```

14. 코딩

```
1 package com.example.administrator.selectactivity;
2
3 import ...
4
5
6
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}
```

15. 코딩

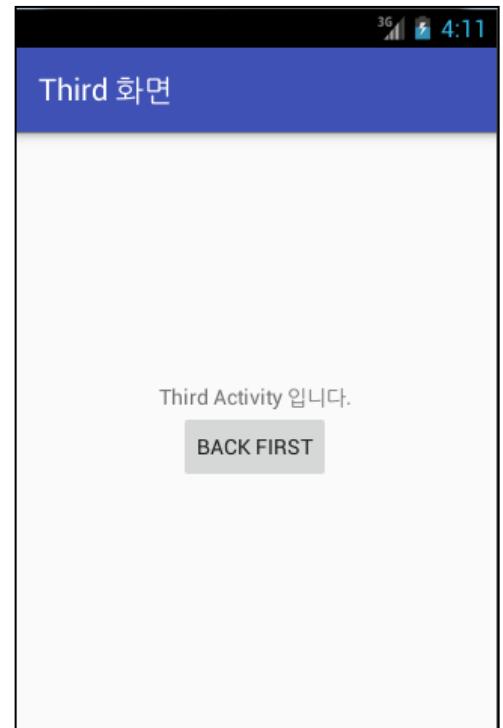
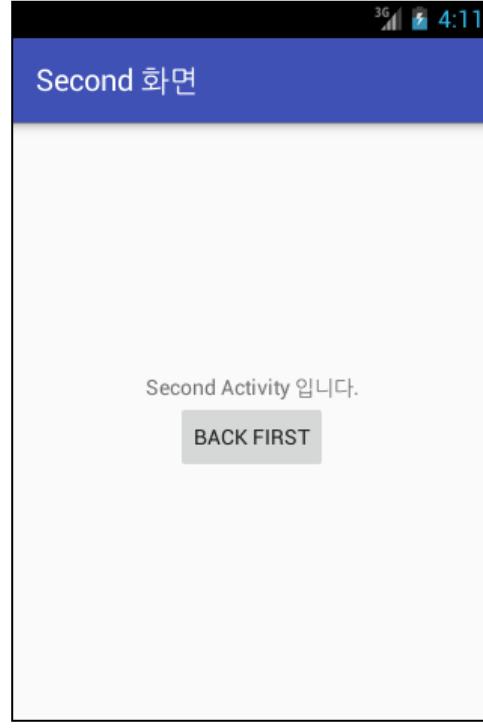
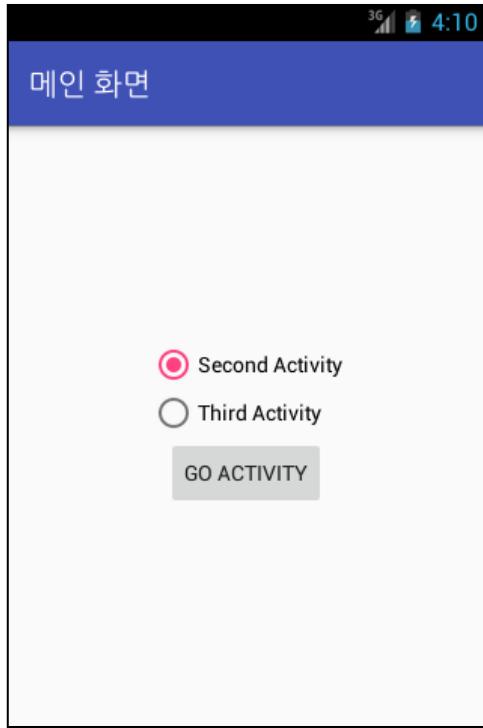
```
1 package com.example.administrator.selectactivity;
2
3 import ...
4
5
6
7 public class ThirdActivity extends AppCompatActivity {
8
9
10    Button btnThird;
11
12    @Override
13    protected void onCreate(Bundle savedInstanceState) {
14        super.onCreate(savedInstanceState);
15        setContentView(R.layout.activity_third);
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}
```

```
AndroidManifest.xml x

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

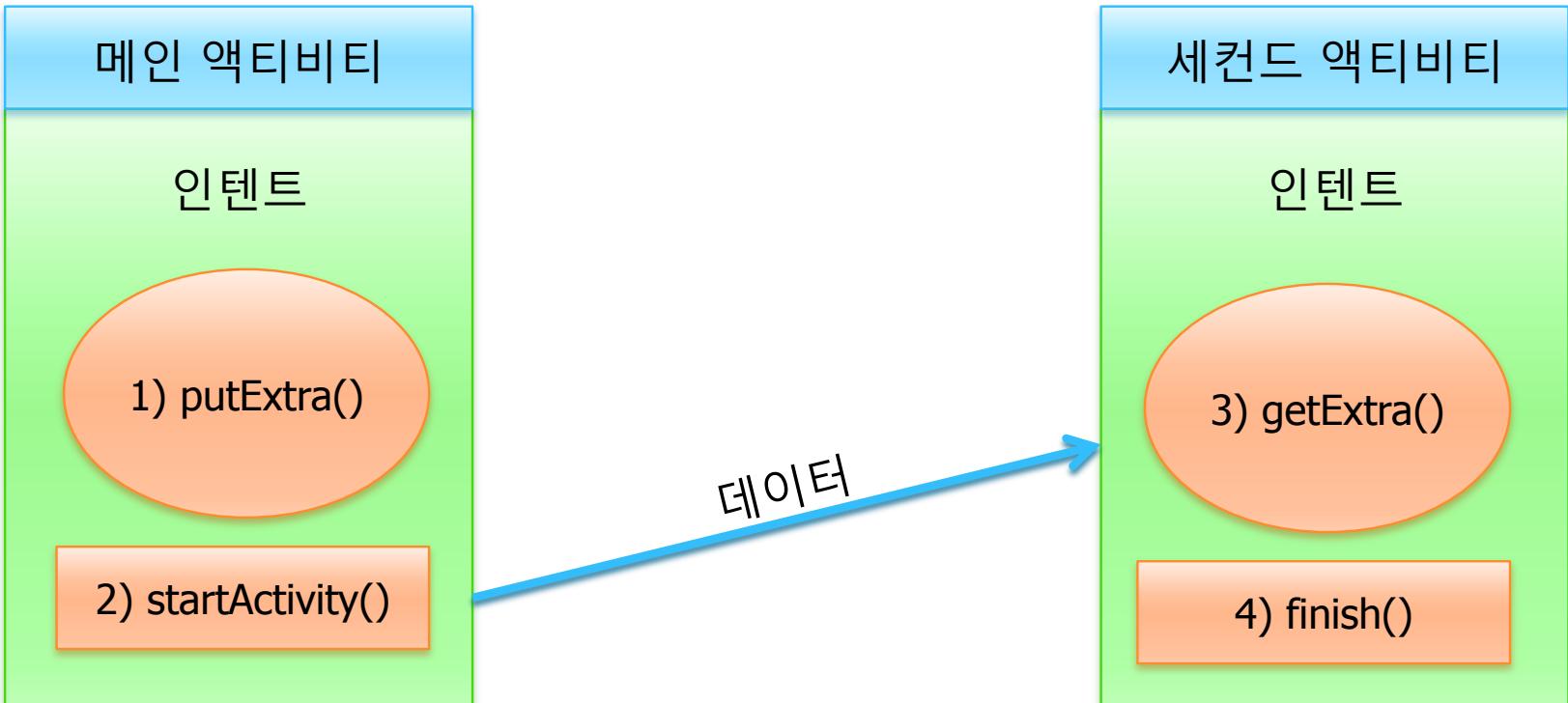
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="SelectActivity"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".MainActivity">
            <intent-filter>
                <action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



Application name: **DatasendIntent**

Company Domain: admid.example.com

Project location: C:\Android\StdWork\DatasendIntent

Target Android Devices

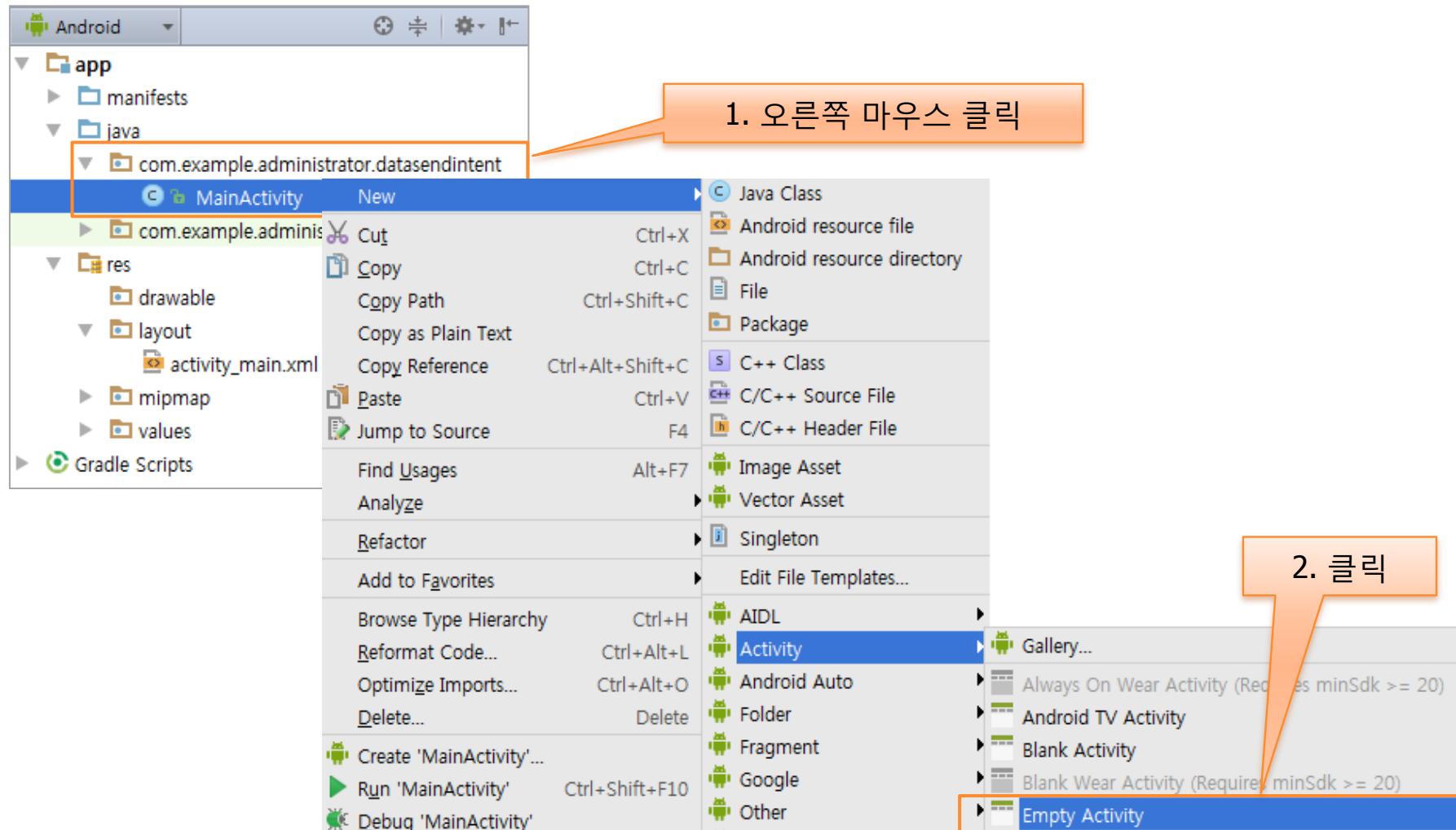
- Phone and Tabet
- Minimun SDK API 15 : Android 4.0.3

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

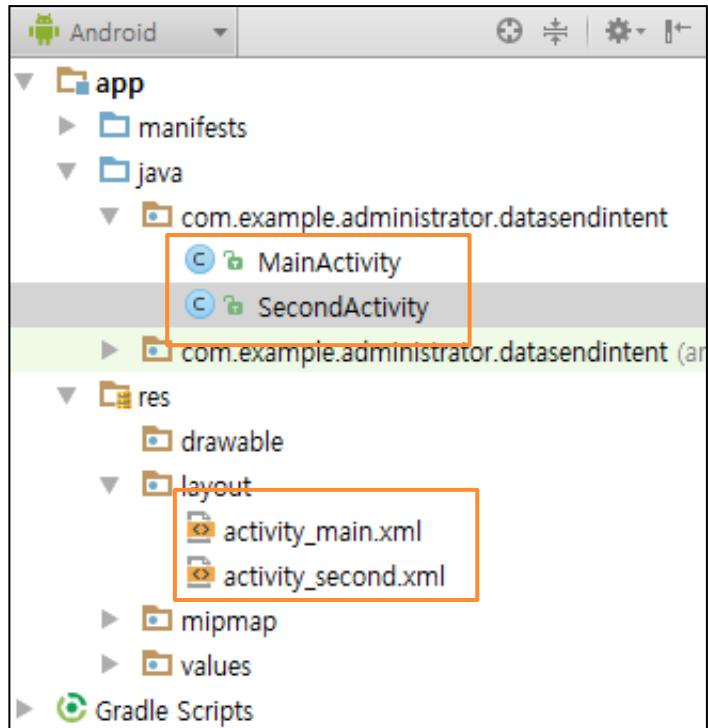
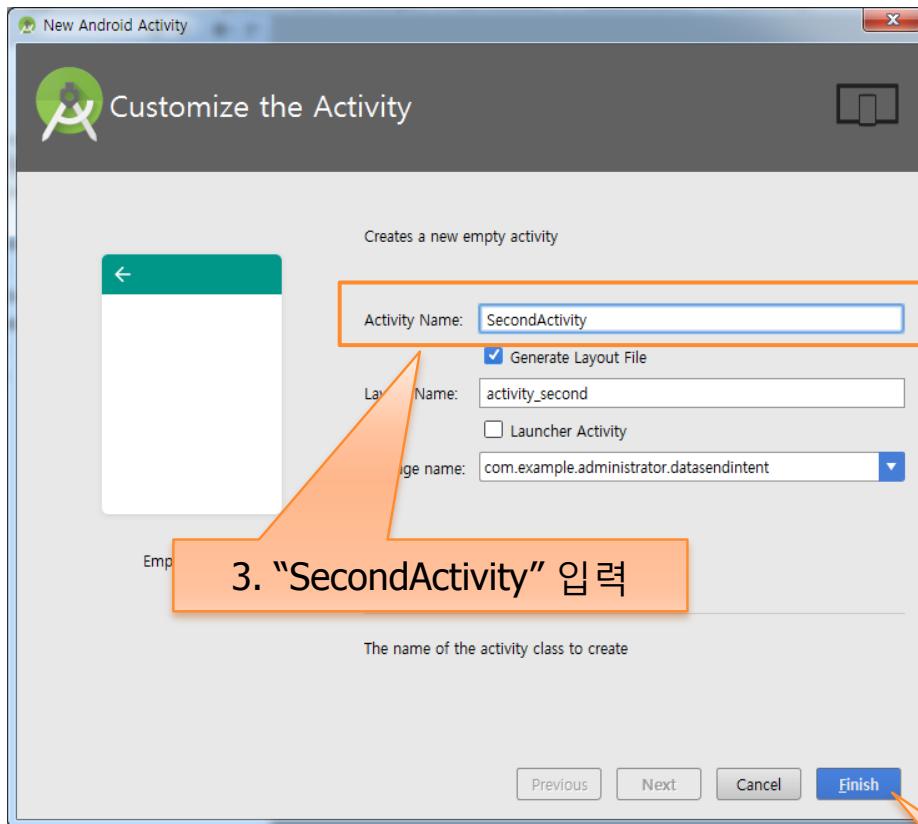
Customize the Activity

Activity Name: **MainActivity**

Layout Name: **activity_main**



secondActivity 추가

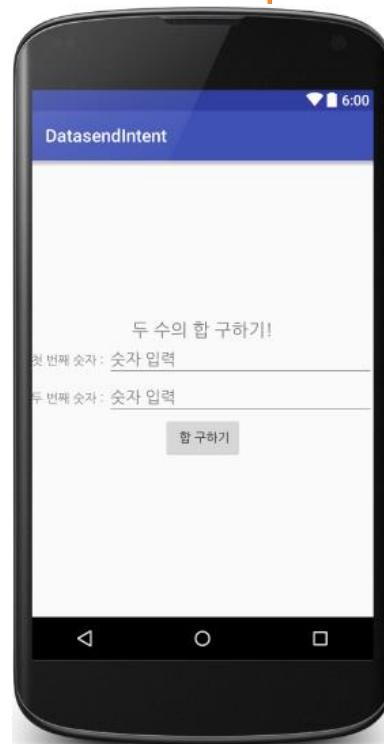


4. 클릭

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     <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



activity_second.xml

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    <Button
19        android:layout_width="wrap_content"
20        android:layout_height="wrap_content"
21        android:id="@+id/finishBtn"
22        android:layout_marginTop="20dp"
23        android:text="Finish"/>
24 </LinearLayout>
```



MainActivity.java

```
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

```
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

9. 코딩

```
c MainActivity.java x
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     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

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.rusultText);
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

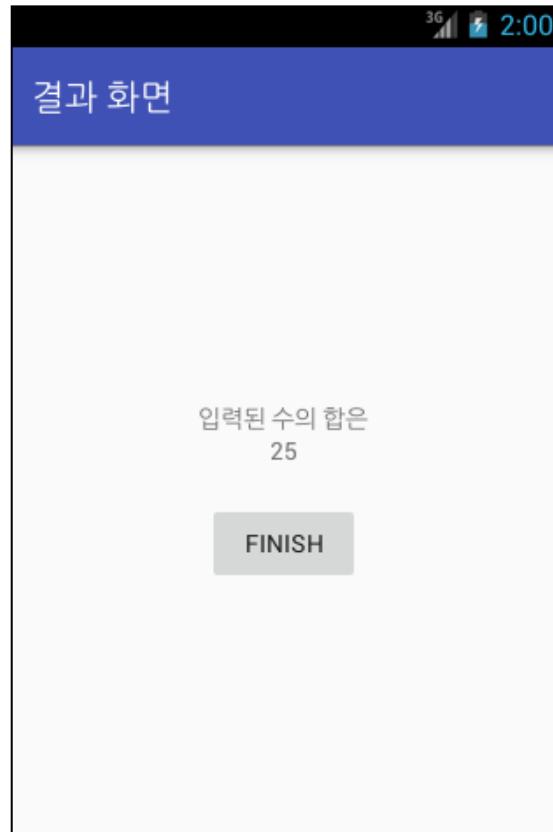
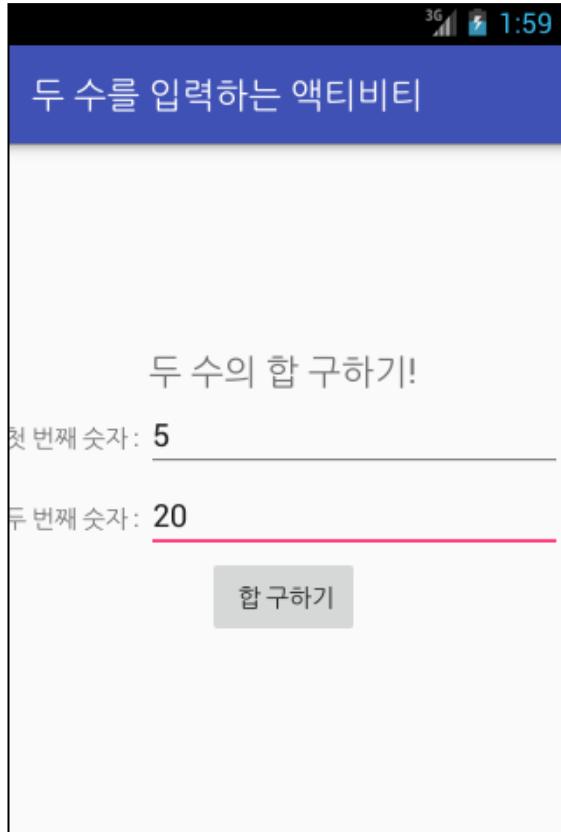
```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.administrator.datasendintent">

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

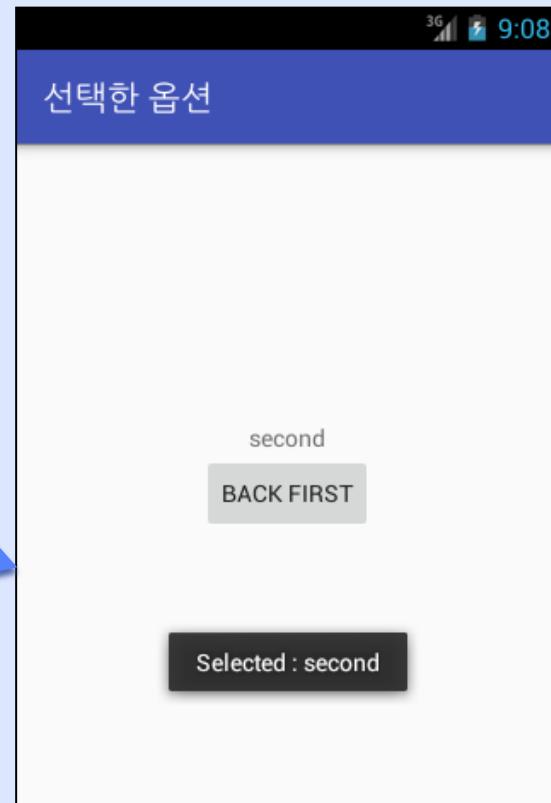
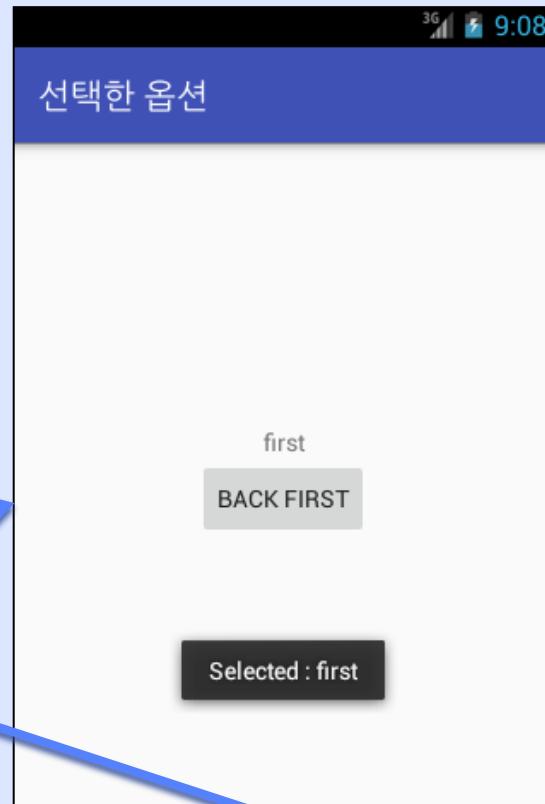
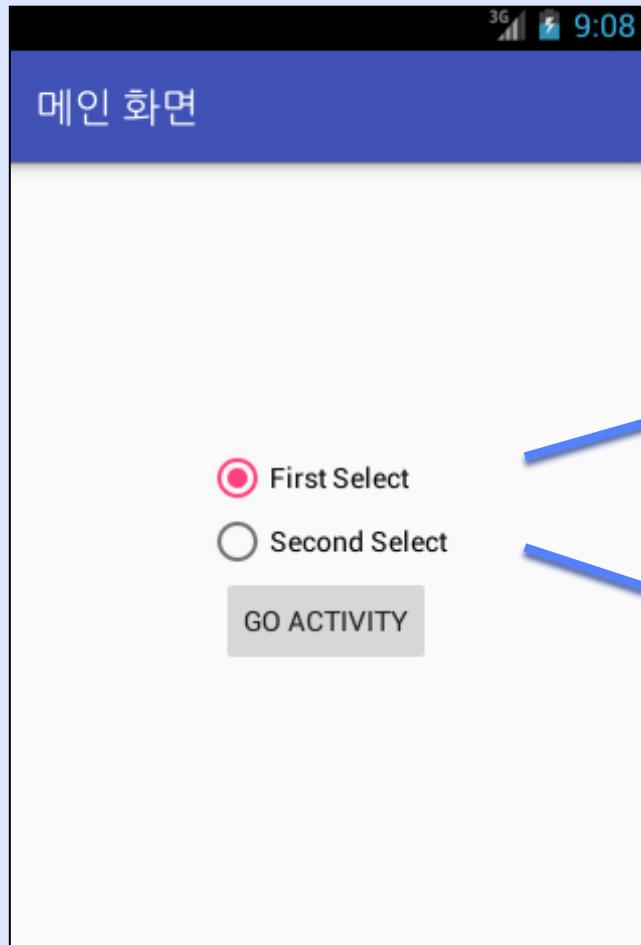
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
        <activity android:name=".SecondActivity"></activity>
    </application>

</manifest>
```

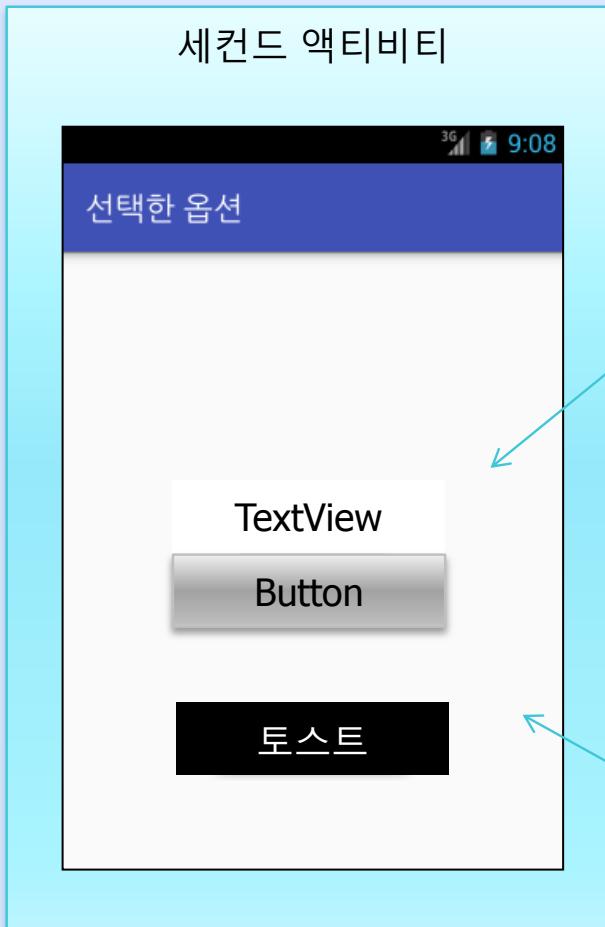
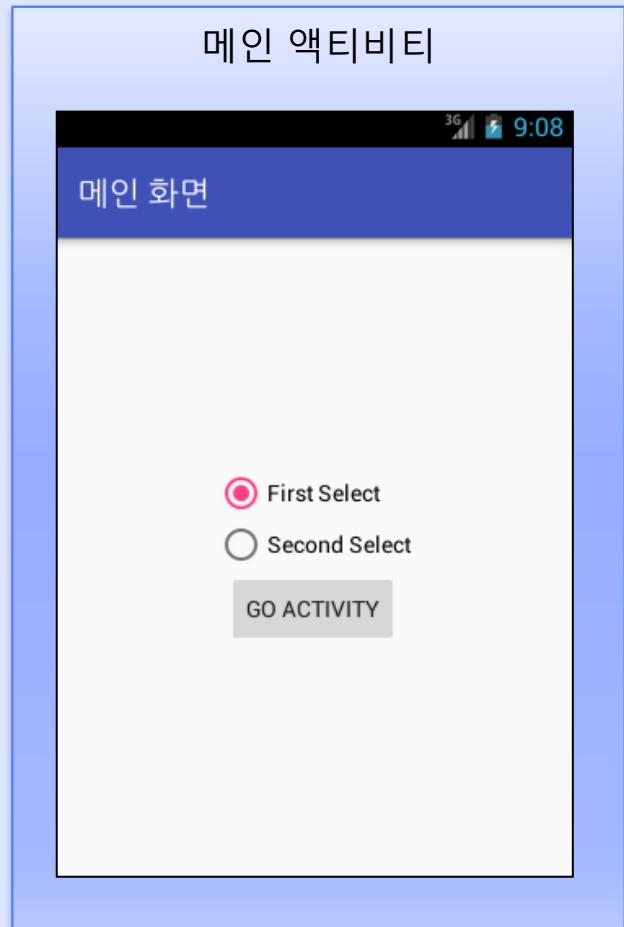
추가 확인



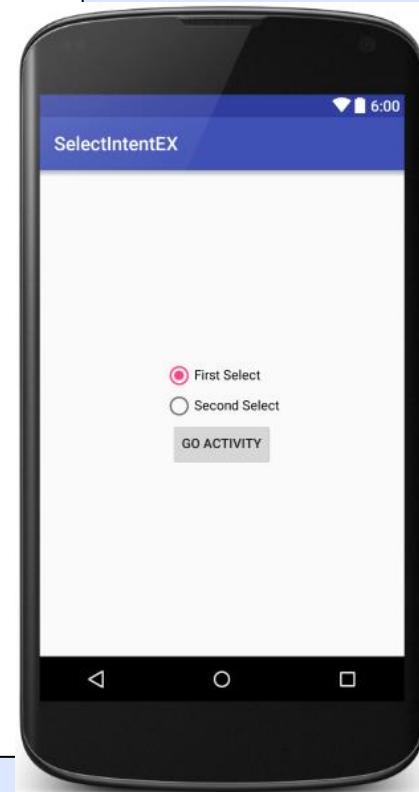
연습 문제



프로젝트 명: SelectIntentEx



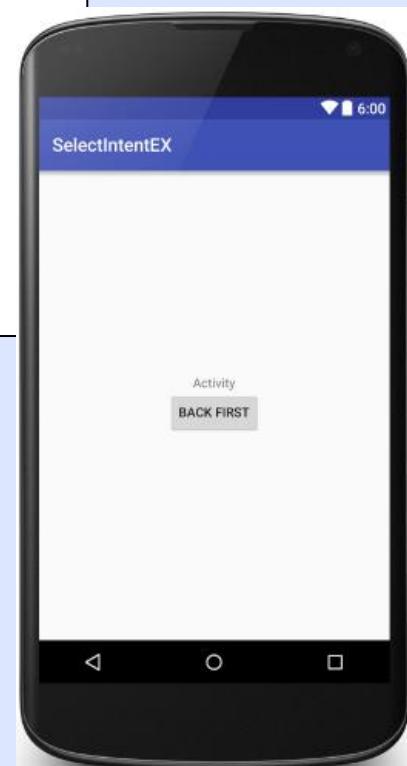
```
activity_main.xml x  
1 <?xml version="1.0" encoding="utf-8"?>  
2 <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
3     android:layout_width="match_parent"  
4     android:layout_height="match_parent"  
5     android:gravity="center"  
6     android:orientation="vertical">  
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

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```
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>
```



```
>MainActivity.java x  
1 package com.example.admin.selectintentex;  
2  
3 import ...  
4  
5  
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 }
```

SecondActivity.java x

```
1 package com.example.admin.selectintentex;
2
3 import ...
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 }
```

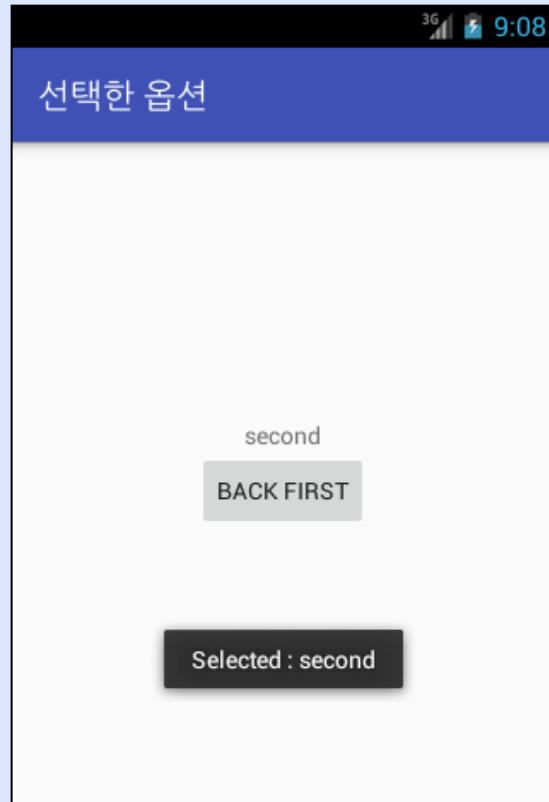
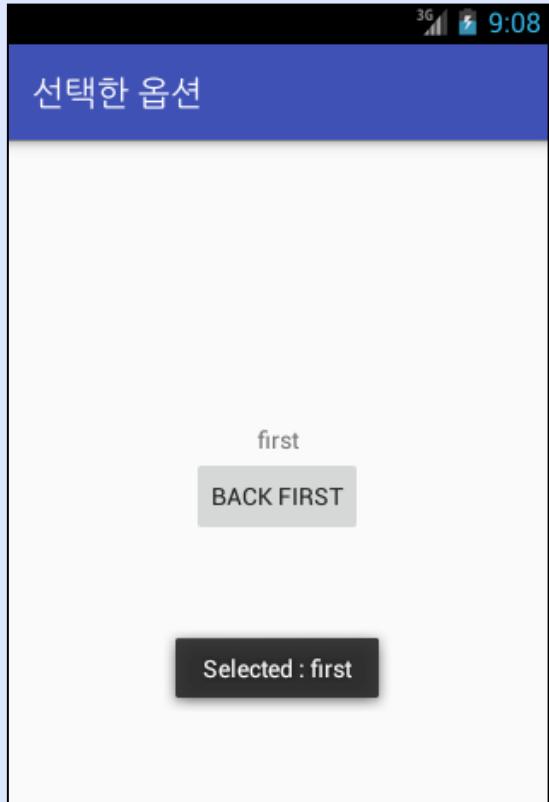
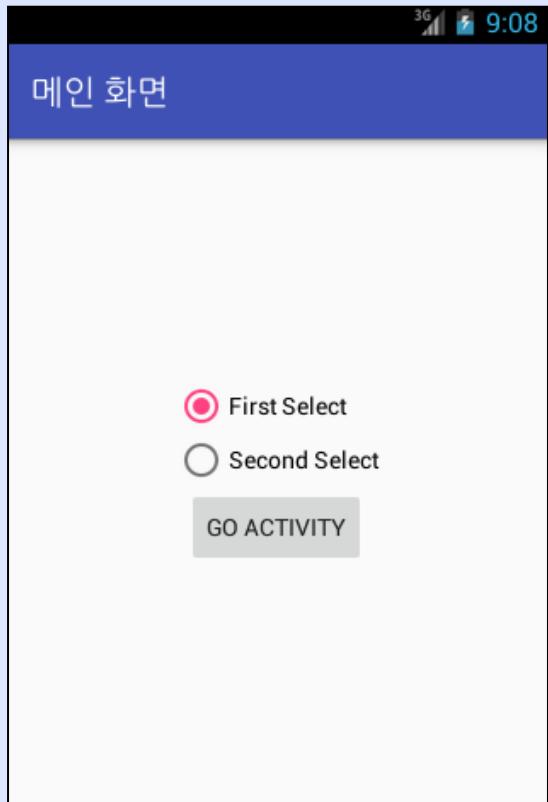
AndroidManifest.xml *

```
<?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" />

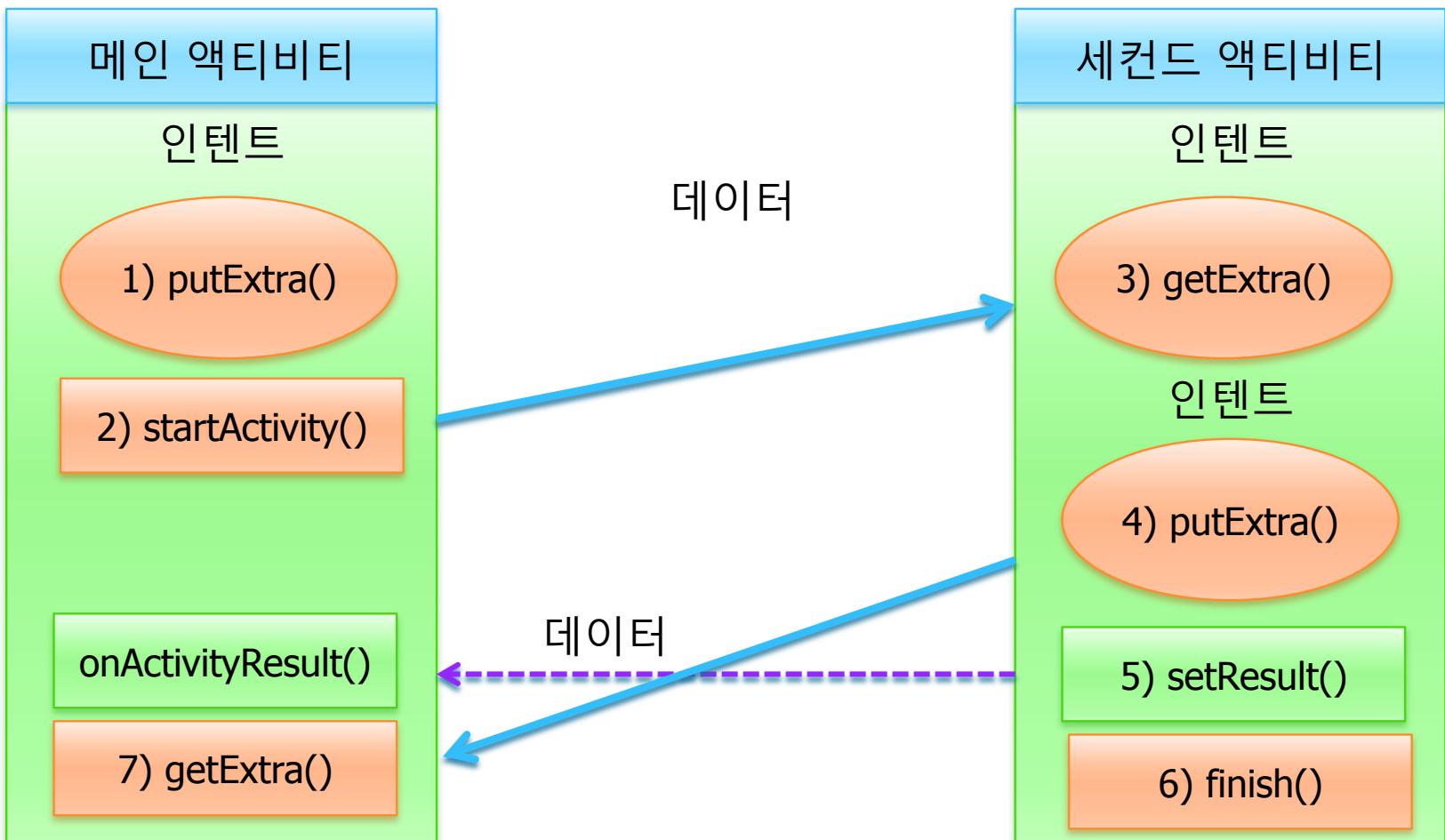
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
        <activity android:name=".SecondActivity"></activity>
    </application>

</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

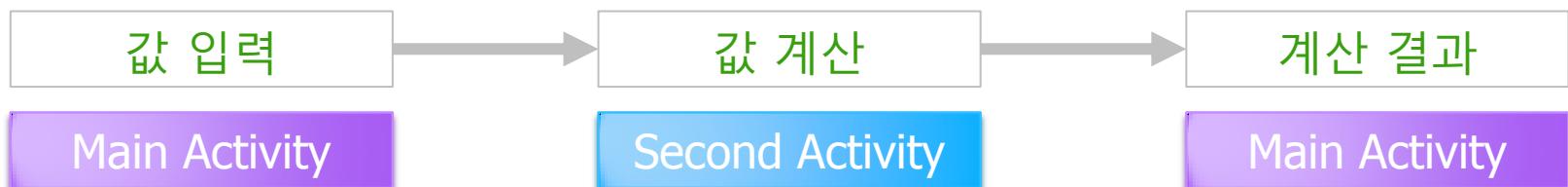
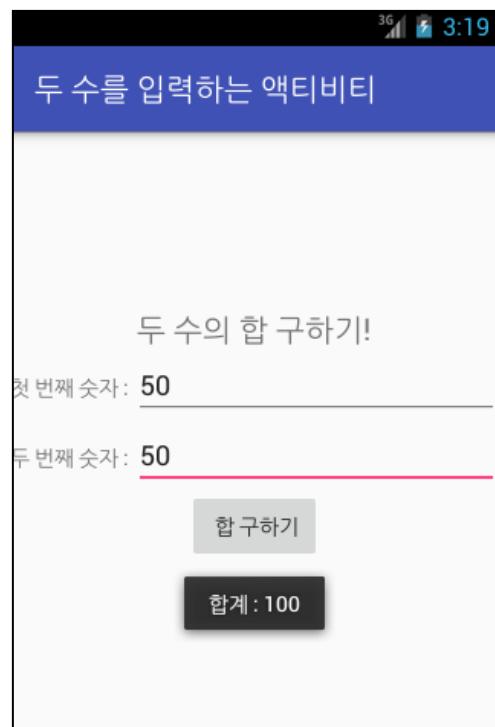
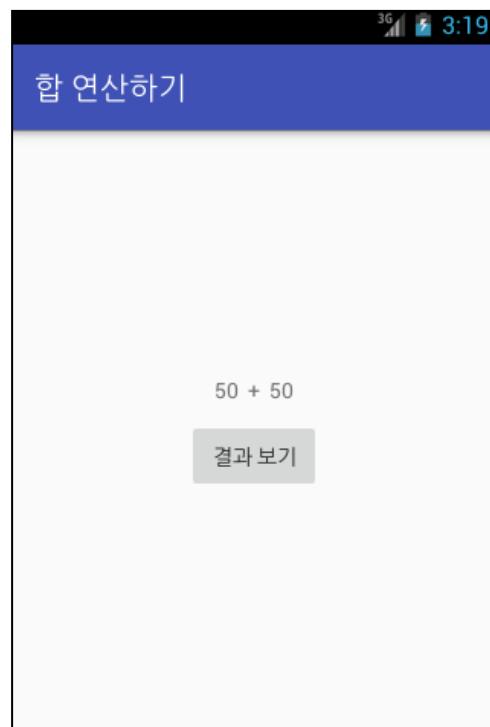
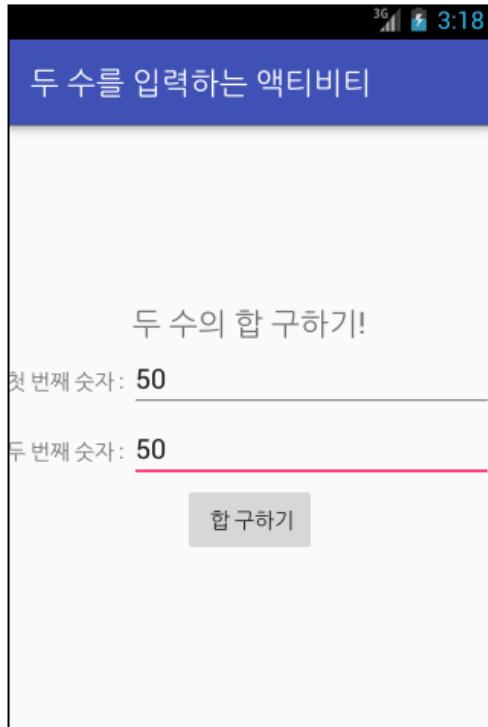
Add an activity to Mobile : `Empty Activity`

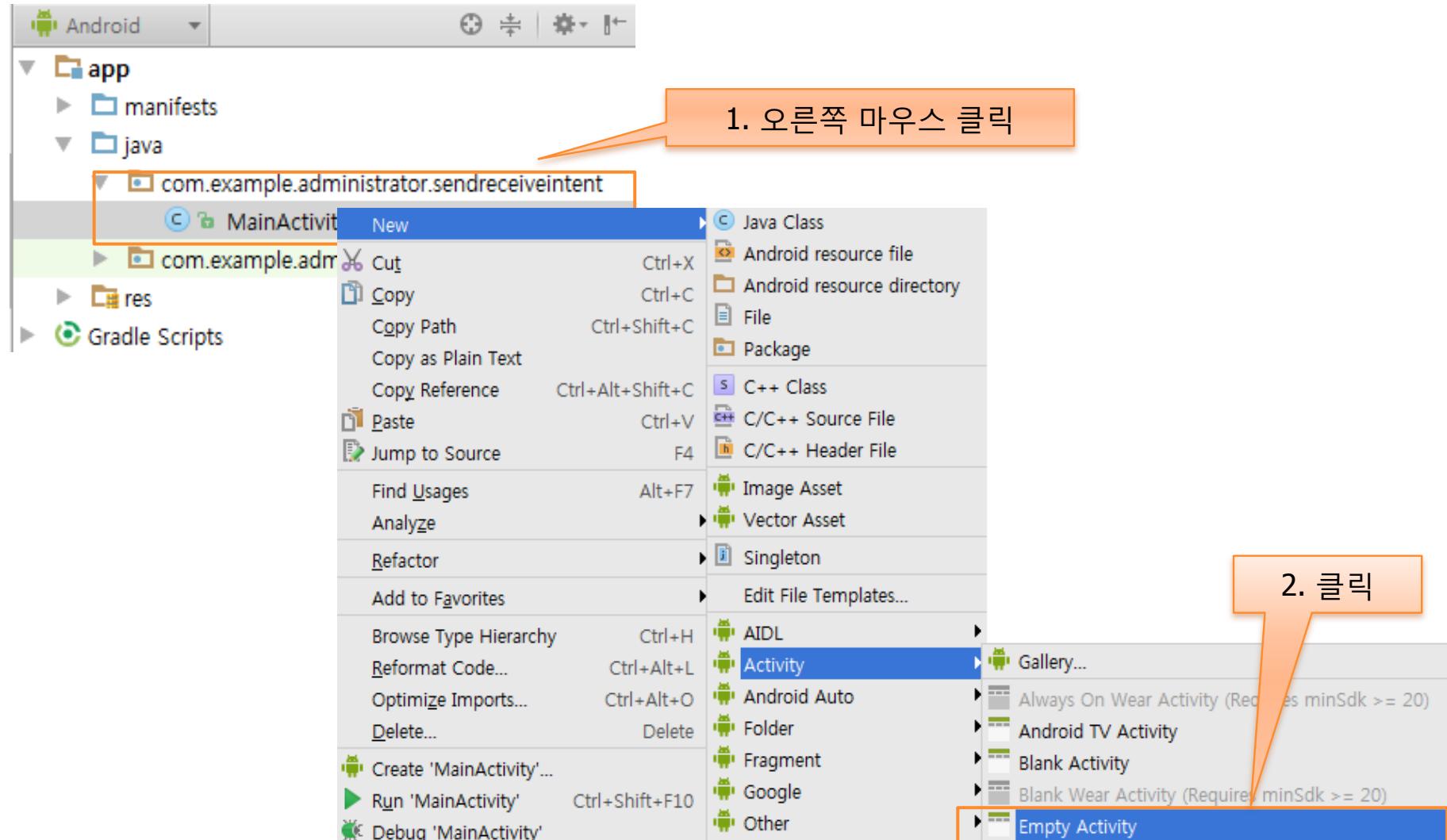
Customize the Activity

Activity Name: `MainActivity`

Layout Name: `activity_main`

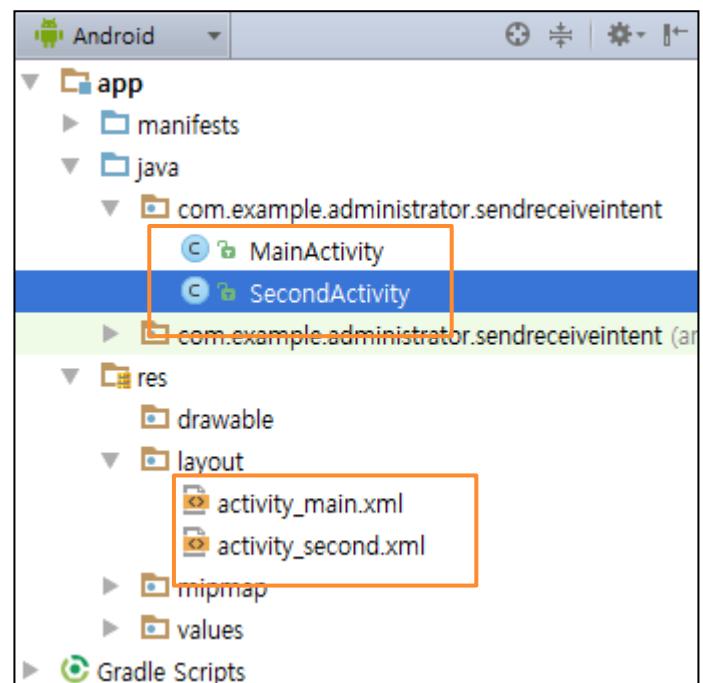
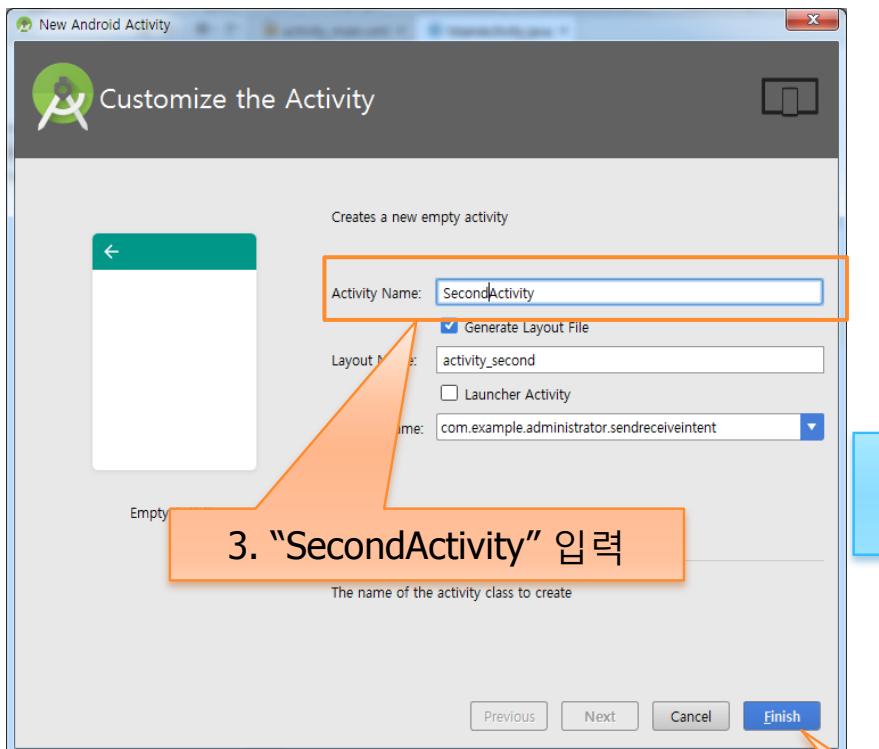






Activity 및 Layout 추가 확인

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4. 클릭

activity_main.xml

```
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 
```

5. 코딩



```
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



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     <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>
```

7. 코딩



8. 코딩

MainActivity.java x

```
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 }
```

MainActivity.java x

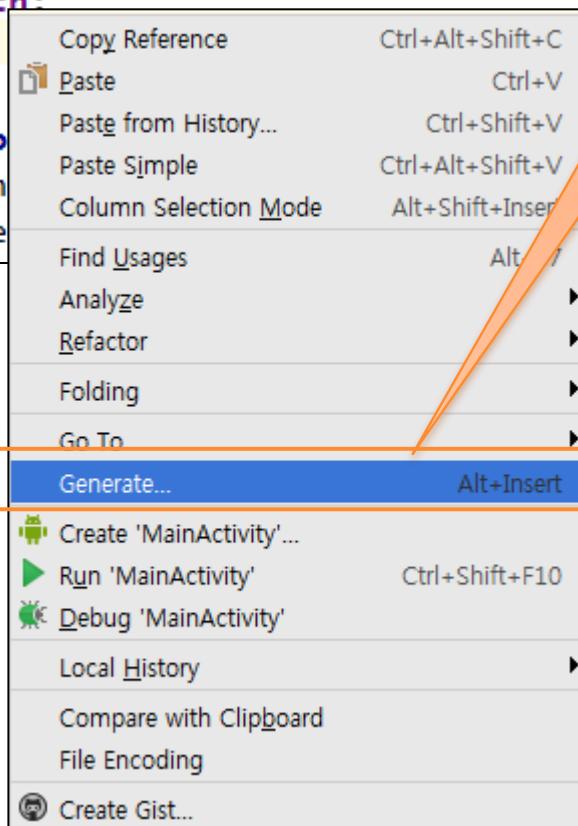
9. 코딩

```
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.

```
2  
3 import ...  
9  
10 public class MainActivity extends AppCompatActivity {  
11  
12     EditText editTextFirst, editTextSecond;  
13     Button btn;  
14     @Override  
15     protected void onCreate(Bundle savedInstanceState) {  
16         super.onCreate(savedInstanceState);  
17         setContentView(R.layout.activity_main);  
18     }  
19 }
```

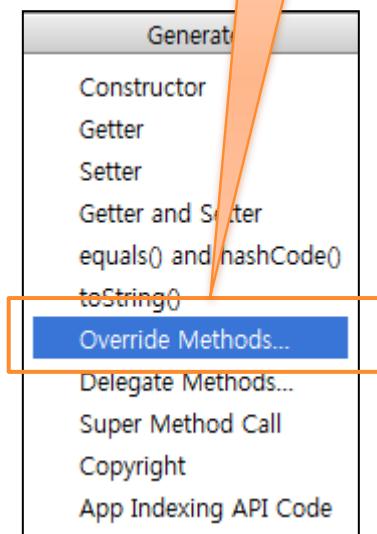
10. Line 14 클릭 후 오른쪾고 마우스 클릭

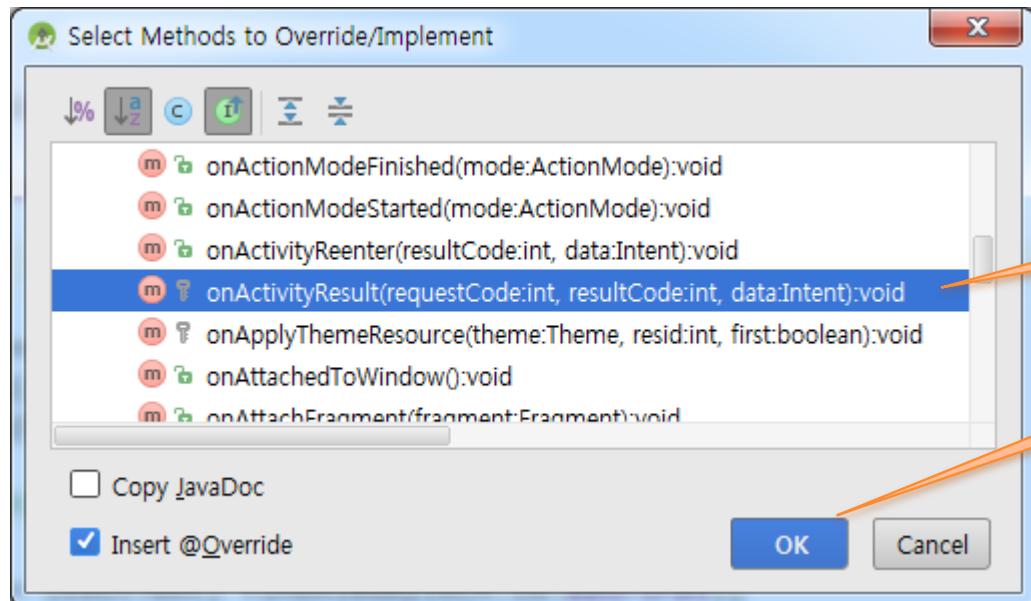


11. 클릭

```
    }  
    ceState) {  
        n);
```

12. 클릭





13. "onActivityResult(...)" 선택

14. 클릭

The code editor shows the MainActivity.java file. A large blue arrow points from the 'Insert @Override' step in the dialog to the newly added code in the editor. The added code is:

```
16  @Override  
17  protected void onActivityResult(int requestCode, int resultCode, Intent data) {  
18      super.onActivityResult(requestCode, resultCode, data);  
19  }
```

15. 추가 확인

MainActivity.java *

```
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);
```

16. 코딩

SecondActivity.java x

```
1 package com.example.administrator.sendreceiveintent;
2
3 import ...
4
5
6
7
8
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.RusultBtn);
24         firstNum = (TextView) findViewById(R.id.firstNum);
25         secondNum = (TextView) findViewById(R.id.secondNum);
26 }
```

17. 코딩

SecondActivity.java x

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() 메소드
가 실행

```
AndroidManifest.xml x

<?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

