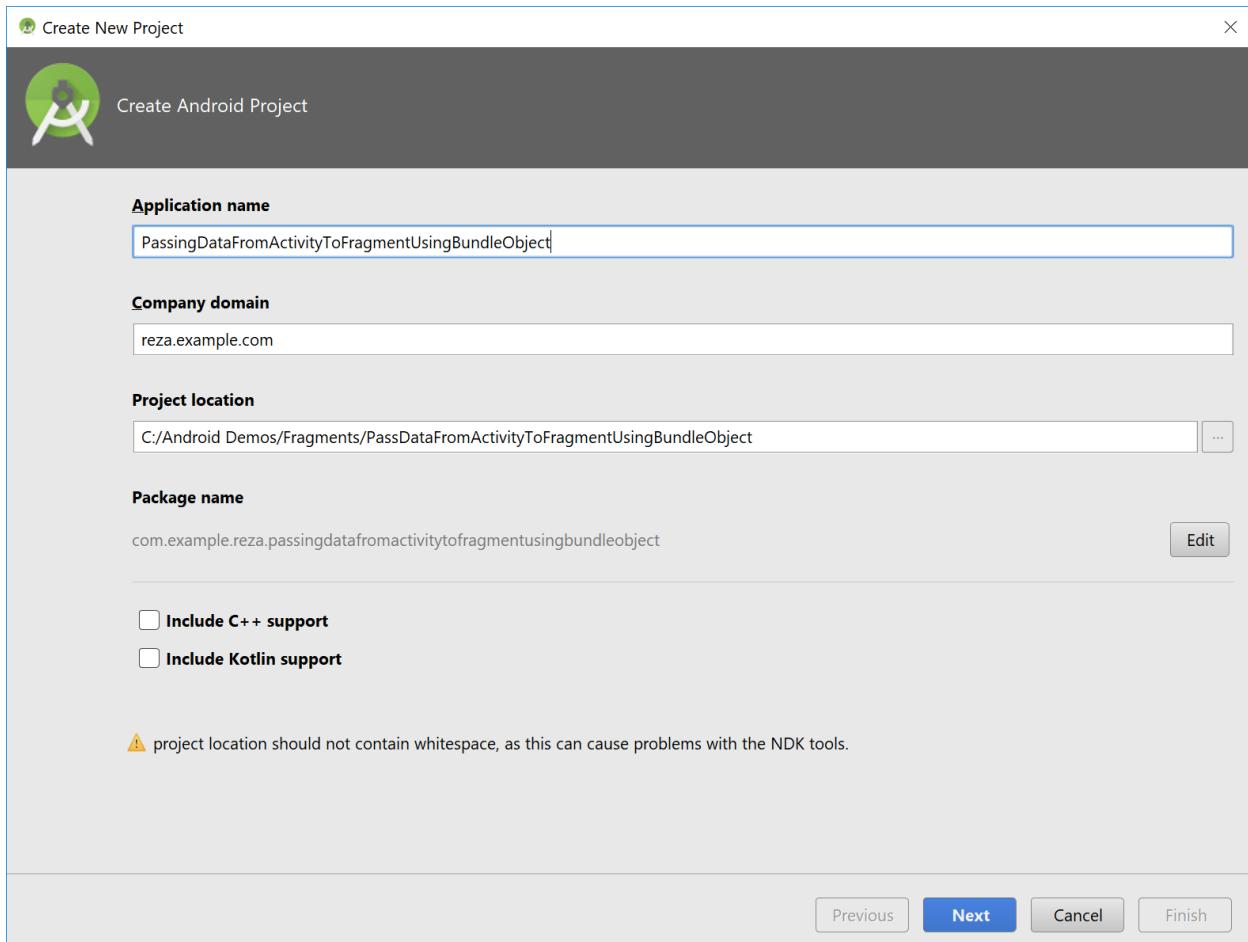


Passing Data from the Activity to the Fragment using Bundle Object

Create a new project as shown:



Create New Project X

Target Android Devices

Select the form factors and minimum SDK

Some devices require additional SDKs. Low API levels target more devices, but offer fewer API features.

Phone and Tablet

API 15: Android 4.0.3 (IceCreamSandwich) ▼

By targeting **API 15 and later**, your app will run on approximately **100%** of devices. [Help me choose](#)

Include Android Instant App support

Wear

API 21: Android 5.0 (Lollipop) ▼

TV

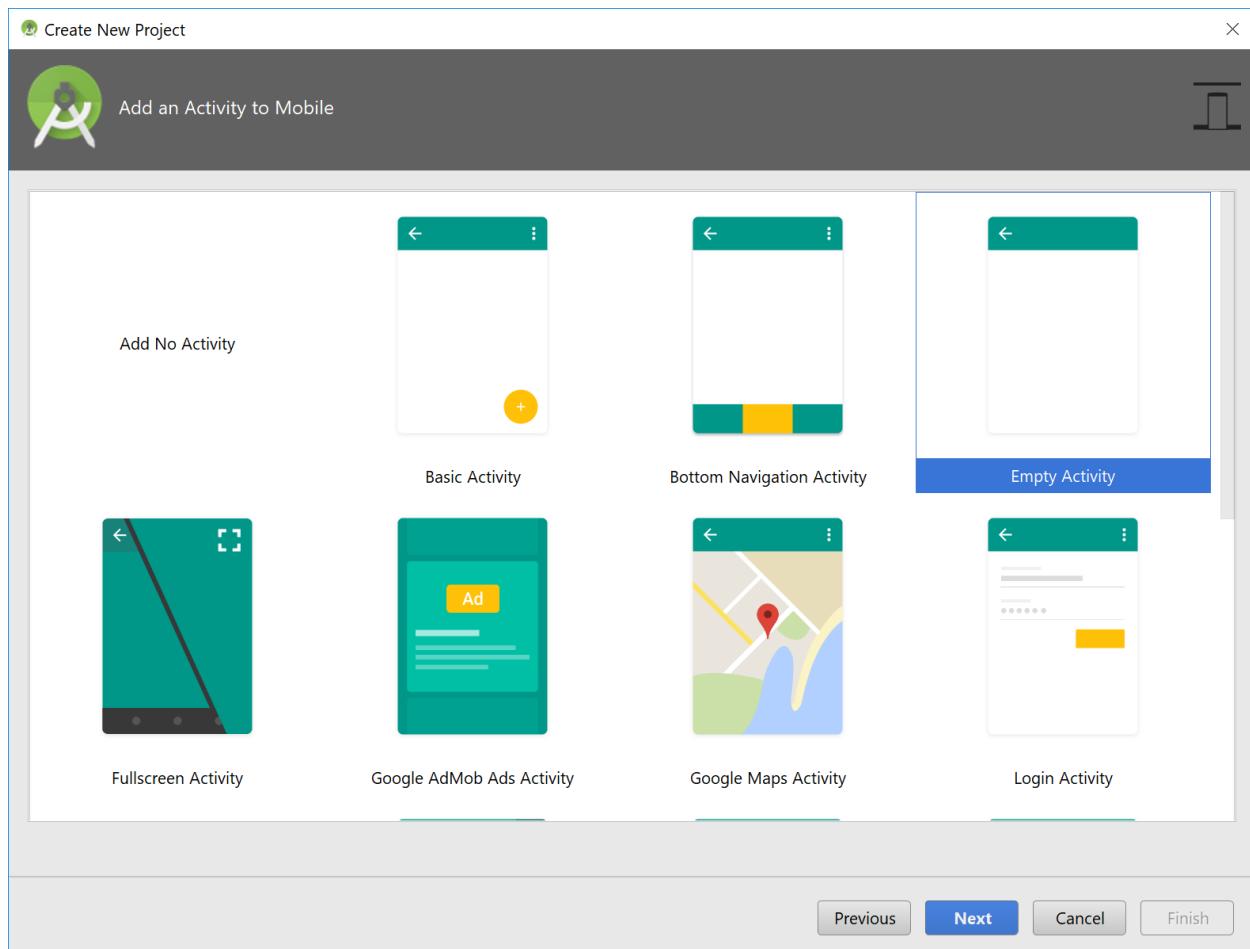
API 21: Android 5.0 (Lollipop) ▼

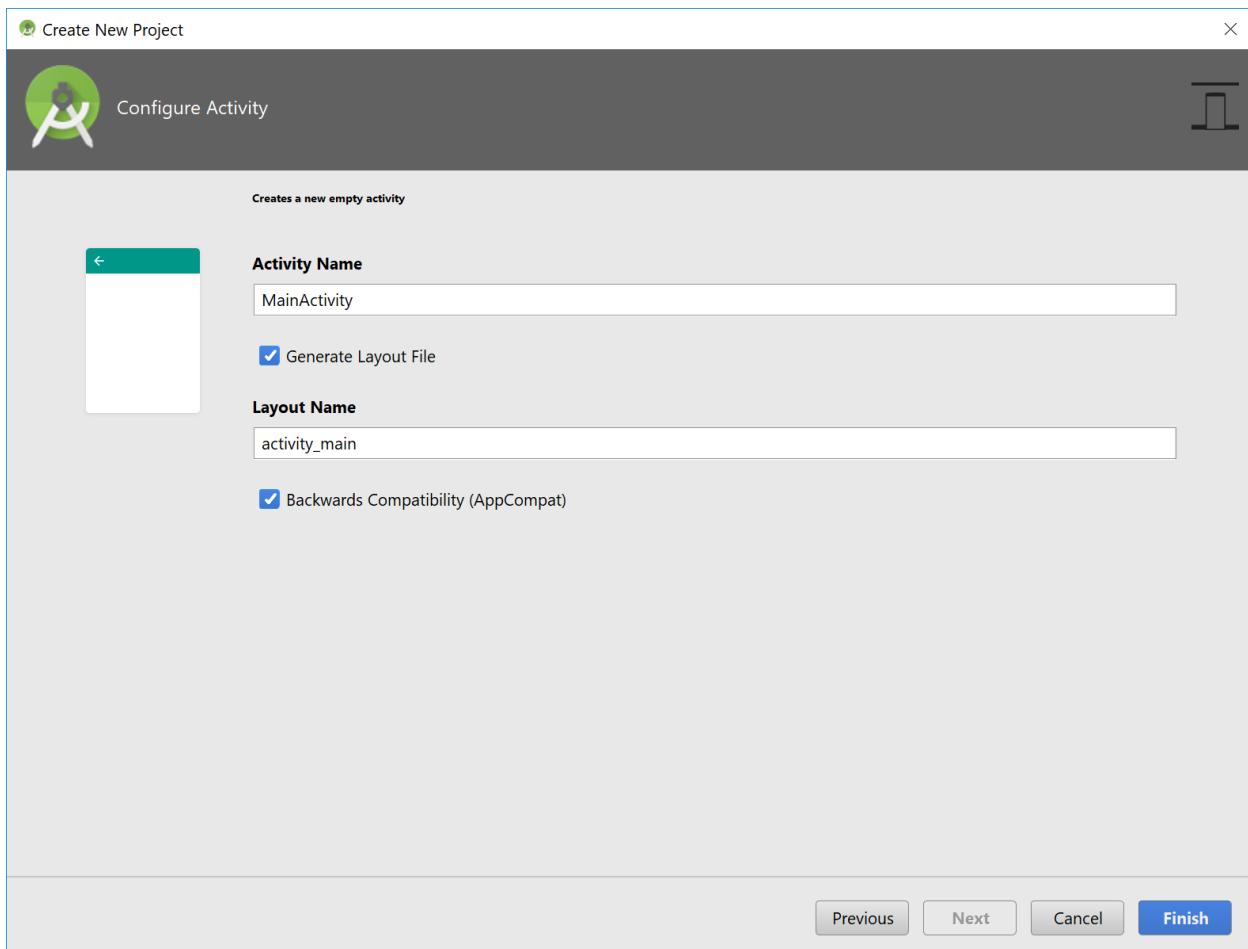
Android Auto

Android Things

API 24: Android 7.0 (Nougat) ▼

Previous Next Cancel Finish



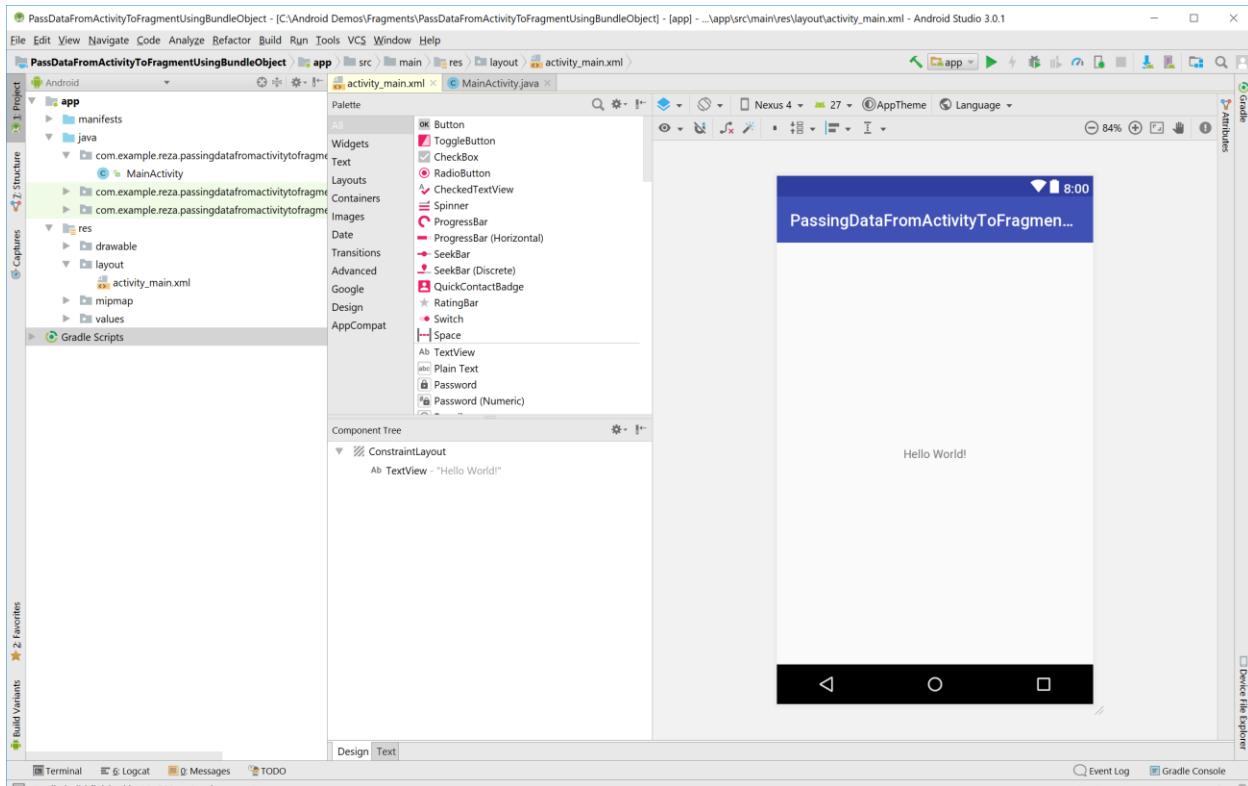


The screenshot shows the Android Studio interface with the project 'PassDataFromActivityToFragmentUsingBundleObject' open. The main window displays the Java code for `MainActivity.java`. The code defines a class `MainActivity` that extends `AppCompatActivity`. It overrides the `onCreate` method to set the content view to `R.layout.activity_main`.

```
1 package com.example.reza.passingdatafromactivitytofragmentusingbundleobject;
2
3 import android.support.v7.app.AppCompatActivity;
4 import android.os.Bundle;
5
6 public class MainActivity extends AppCompatActivity {
7
8     @Override
9     protected void onCreate(Bundle savedInstanceState) {
10         super.onCreate(savedInstanceState);
11         setContentView(R.layout.activity_main);
12     }
13 }
```

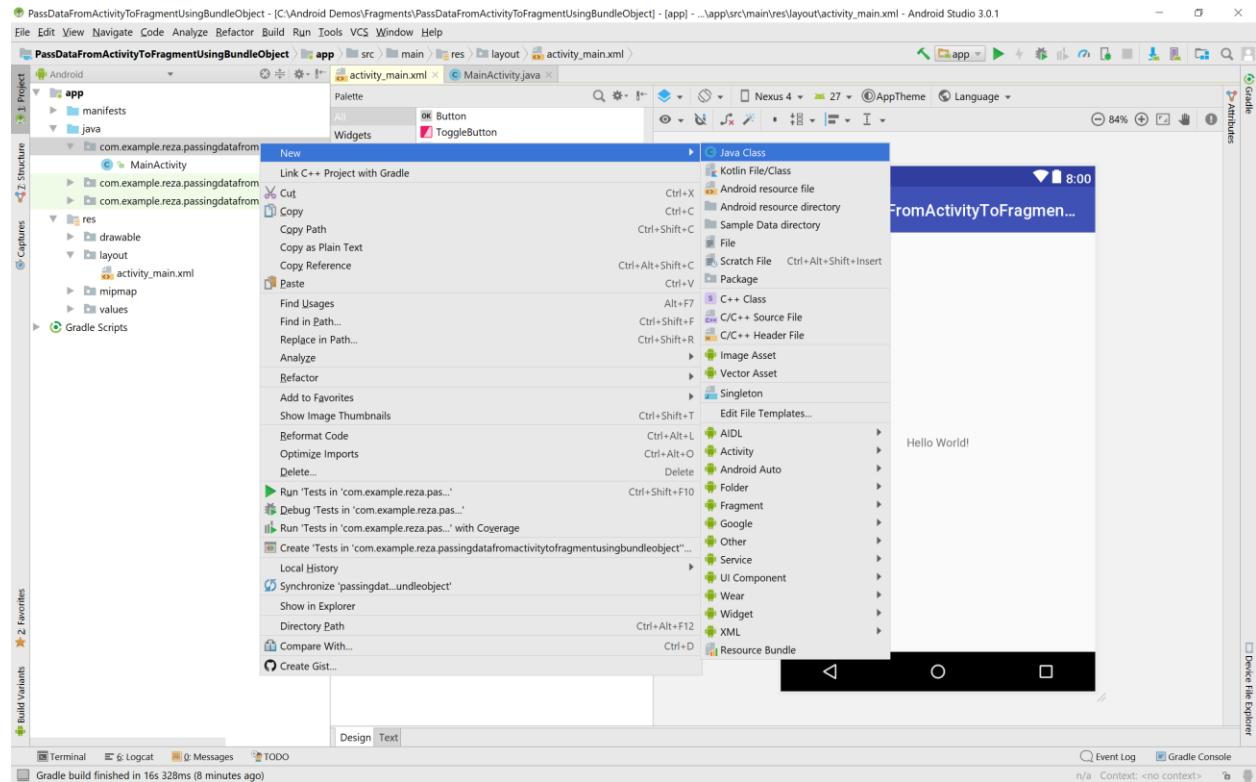
The screenshot shows the Android Studio interface with the project 'PassDataFromActivityToFragmentUsingBundleObject' open. The main window displays the XML code for `activity_main.xml` in Text mode. The layout uses a `ConstraintLayout` and contains a single `TextView` with the text "Hello World!". The `TextView` has constraints relative to its parent.

```
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context="com.example.reza.passingdatafromactivitytofragmentusingbundleobject.MainActivity">
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
</android.support.constraint.ConstraintLayout>
```



We need to change the `activity_main.xml` and `MainActivity.java` files but we do it later.

Now add a fragment as shown:



 Create New Class X

Name:	FragmentA
Kind:	<input checked="" type="radio"/> Class ▼
Superclass:	
Interface(s):	
Package:	com.example.reza.passingdatafromactivitytofragmentusingbundleobject
Visibility:	<input checked="" type="radio"/> Public <input type="radio"/> Package Private
Modifiers:	<input checked="" type="radio"/> None <input type="radio"/> Abstract <input type="radio"/> Final

Show Select Overrides Dialog

OK Cancel Help

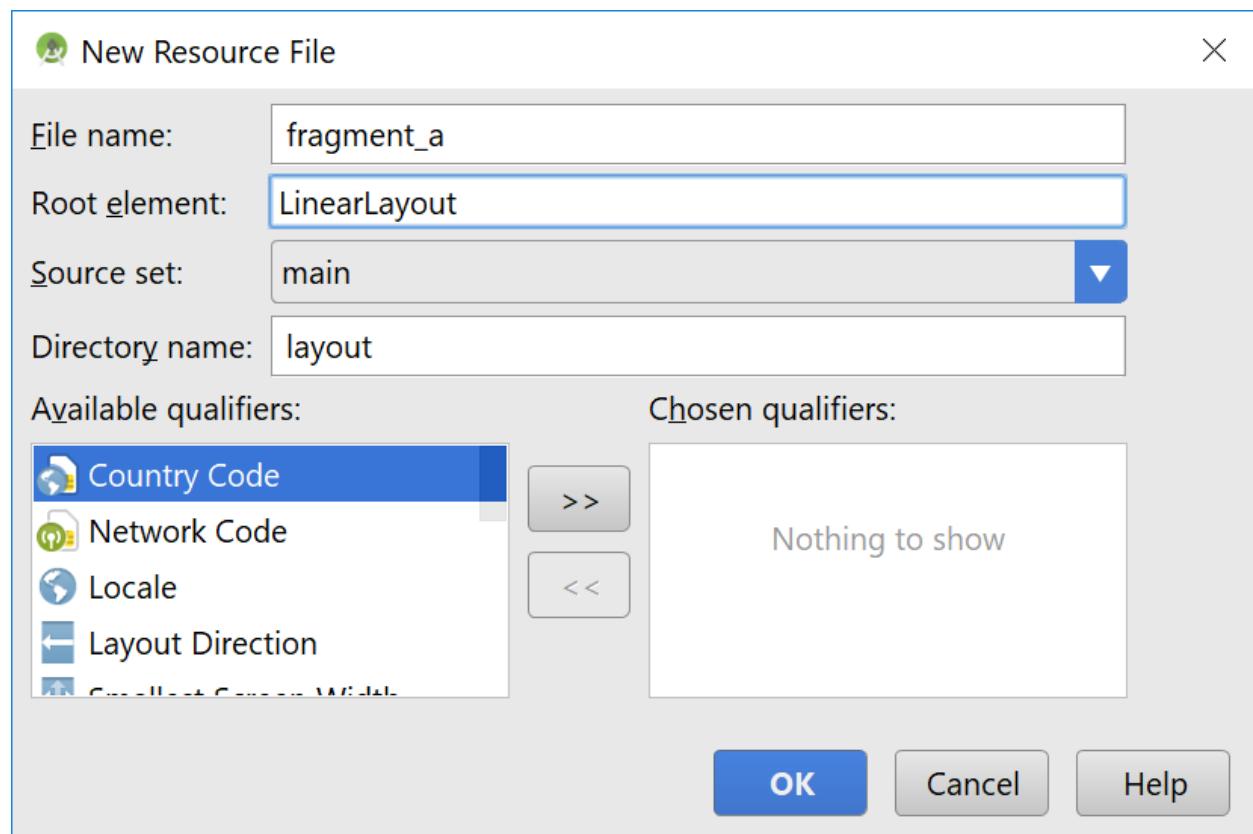
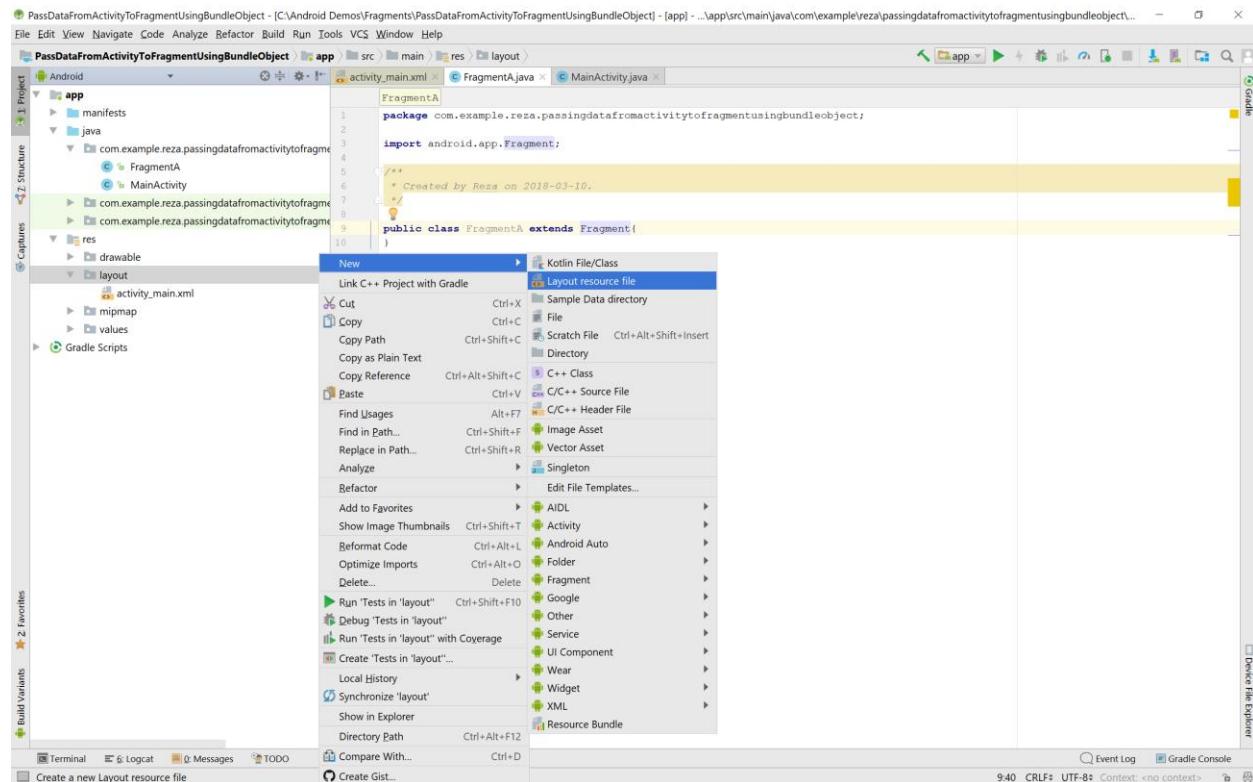
The screenshot shows the Android Studio interface with the project 'PassDataFromActivityToFragmentUsingBundleObject' open. The Project tool window on the left shows the app module structure with Java, XML, and resources. The FragmentA.java file is selected in the editor, displaying the following code:

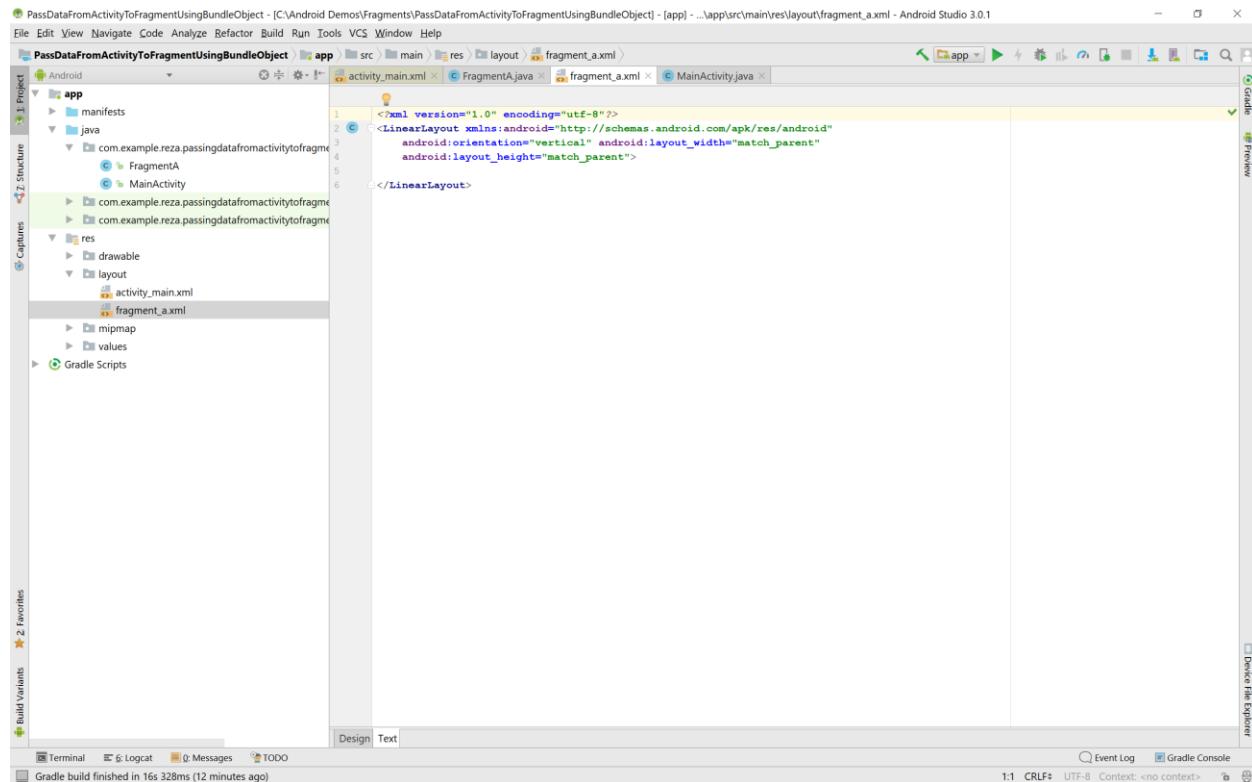
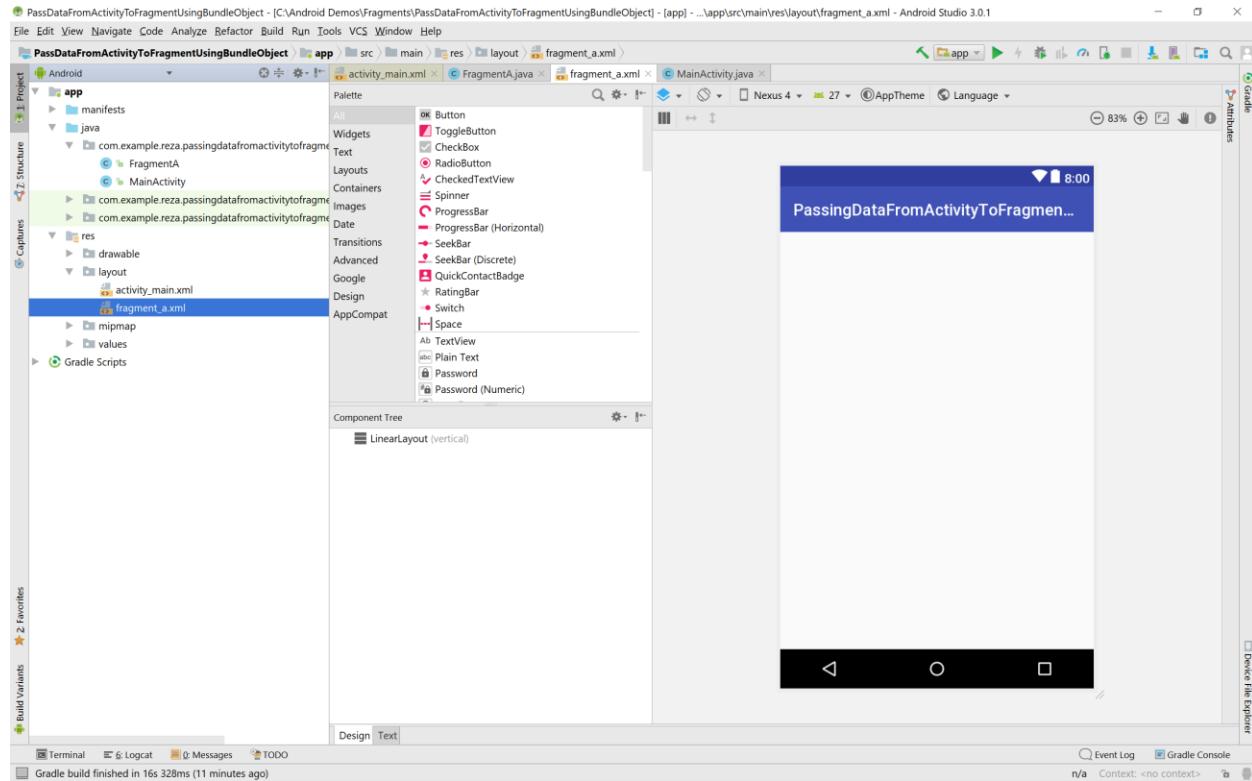
```
1 package com.example.reza.passingdatafromactivitytofragmentusingbundleobject;
2
3 /**
4 * Created by Reza on 2018-03-10.
5 */
6
7 public class FragmentA extends Fragment {
```

The screenshot shows the same Android Studio interface after adding imports. The FragmentA.java file now includes the following code:

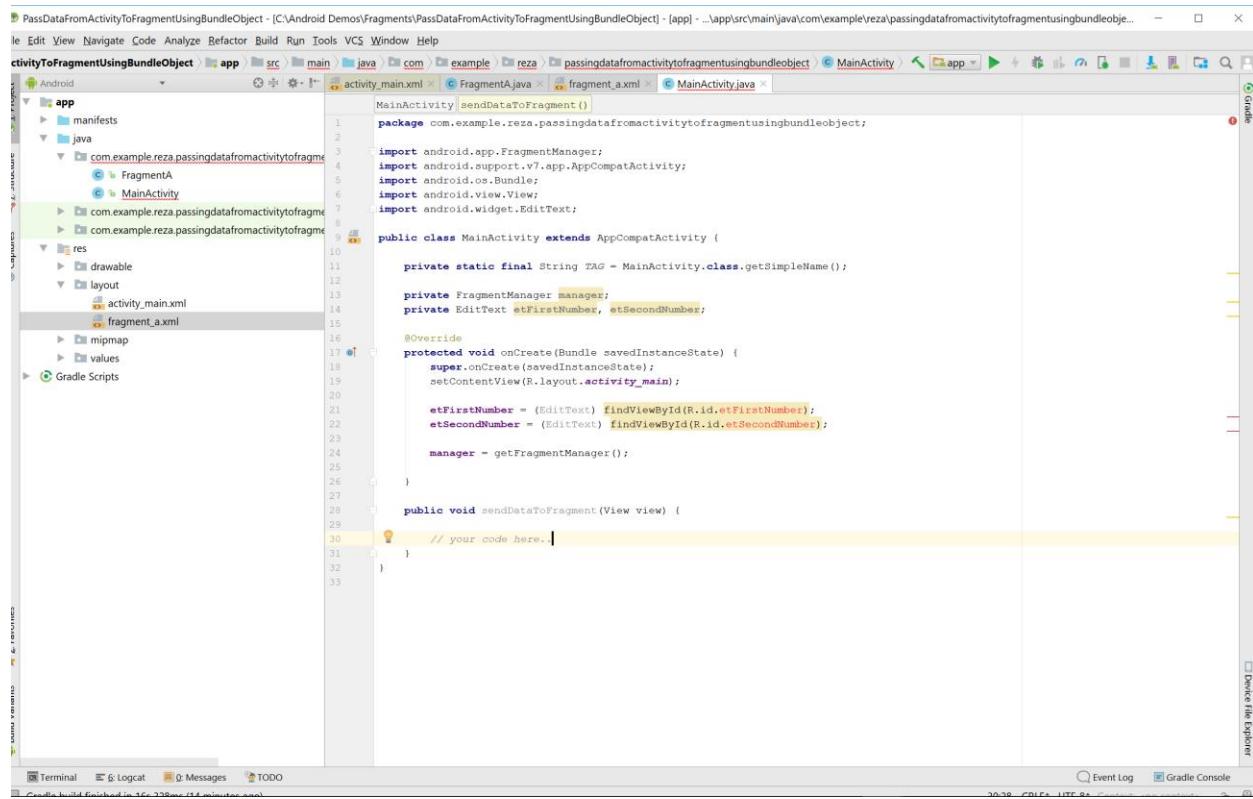
```
1 package com.example.reza.passingdatafromactivitytofragmentusingbundleobject;
2
3 import android.app.Fragment;
4
5 /**
6 * Created by Reza on 2018-03-10.
7 */
8
9 public class FragmentA extends Fragment {
```

Next create a layout for your fragment class as shown:





Now change the MainActivity.java as shown:



The screenshot shows the Android Studio interface with the project 'PassDataFromActivityToFragmentUsingBundleObject' open. The code editor displays the MainActivity.java file, which contains the following code:

```
>MainActivity sendDataToFragment()
```

```
package com.example.reza.passingdatafromactivitytofragmentusingbundleobject;
```

```
import android.app.FragmentManager;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.EditText;
```

```
public class MainActivity extends AppCompatActivity {

    private static final String TAG = MainActivity.class.getSimpleName();

    private FragmentManager manager;
    private EditText etFirstNumber, etSecondNumber;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

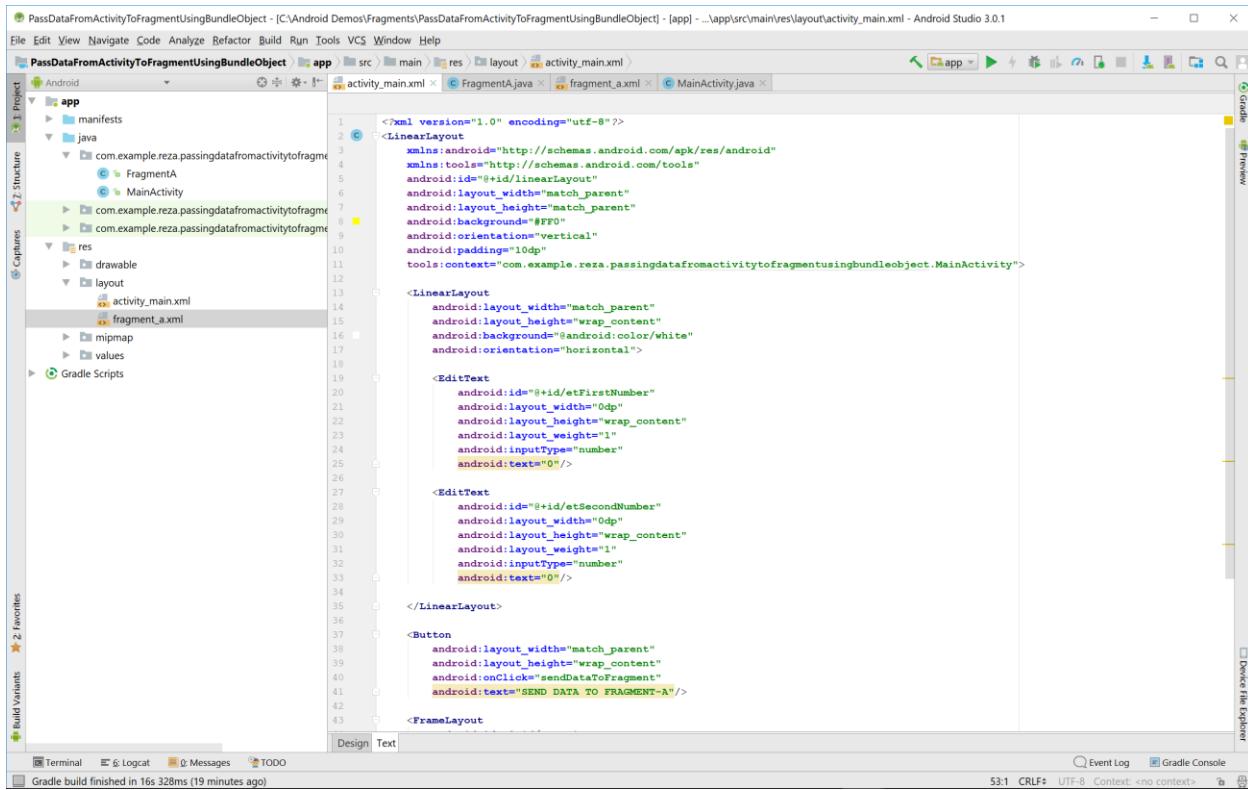
        etFirstNumber = (EditText) findViewById(R.id.etFirstNumber);
        etSecondNumber = (EditText) findViewById(R.id.etSecondNumber);

        manager = getFragmentManager();
    }

    public void sendDataToFragment(View view) {
        // your code here.
    }
}
```

The code editor highlights the line 'public void sendDataToFragment(View view)' with a yellow background, indicating where the user should add their own code.

Then modify the activity_main.xml file as shown:



```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/linearLayout"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="#FF0000"
    android:orientation="vertical"
    android:padding="10dp"
    tools:context="com.example.reza.passingdatafromactivitytofragment.MainActivity">

    <EditText
        android:id="@+id/etFirstNumber"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:background="@android:color/white"
        android:orientation="horizontal"/>

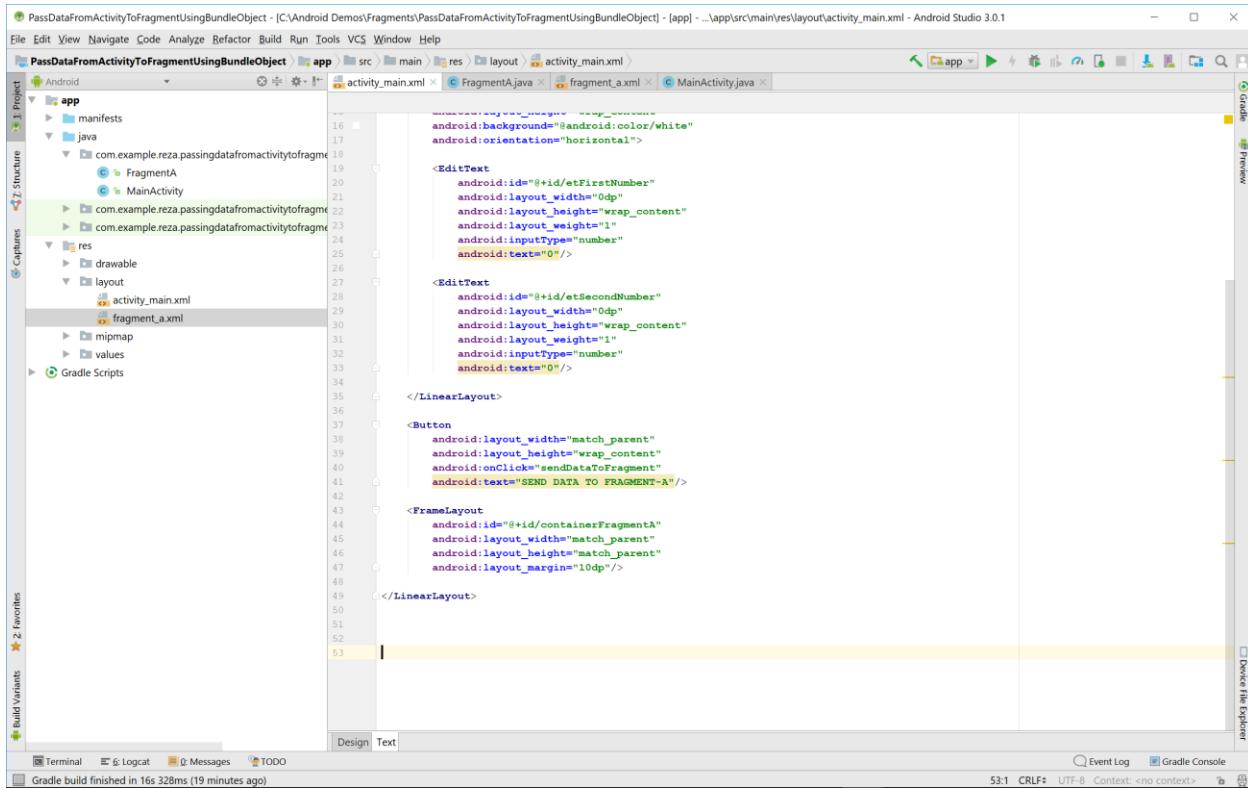
    <EditText
        android:id="@+id/etSecondNumber"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:inputType="number"
        android:text="0"/>

    </LinearLayout>

    <Button
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:onClick="sendDataToFragment"
        android:text="SEND DATA TO FRAGMENT-A"/>

    <FrameLayout
        android:id="@+id/containerFragmentA"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:layout_margin="10dp"/>

```



```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/linearLayout"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@android:color/white"
    android:orientation="vertical"
    android:padding="10dp"
    tools:context="com.example.reza.passingdatafromactivitytofragment.MainActivity">

    <EditText
        android:id="@+id/etFirstNumber"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:background="@android:color/white"
        android:orientation="horizontal"/>

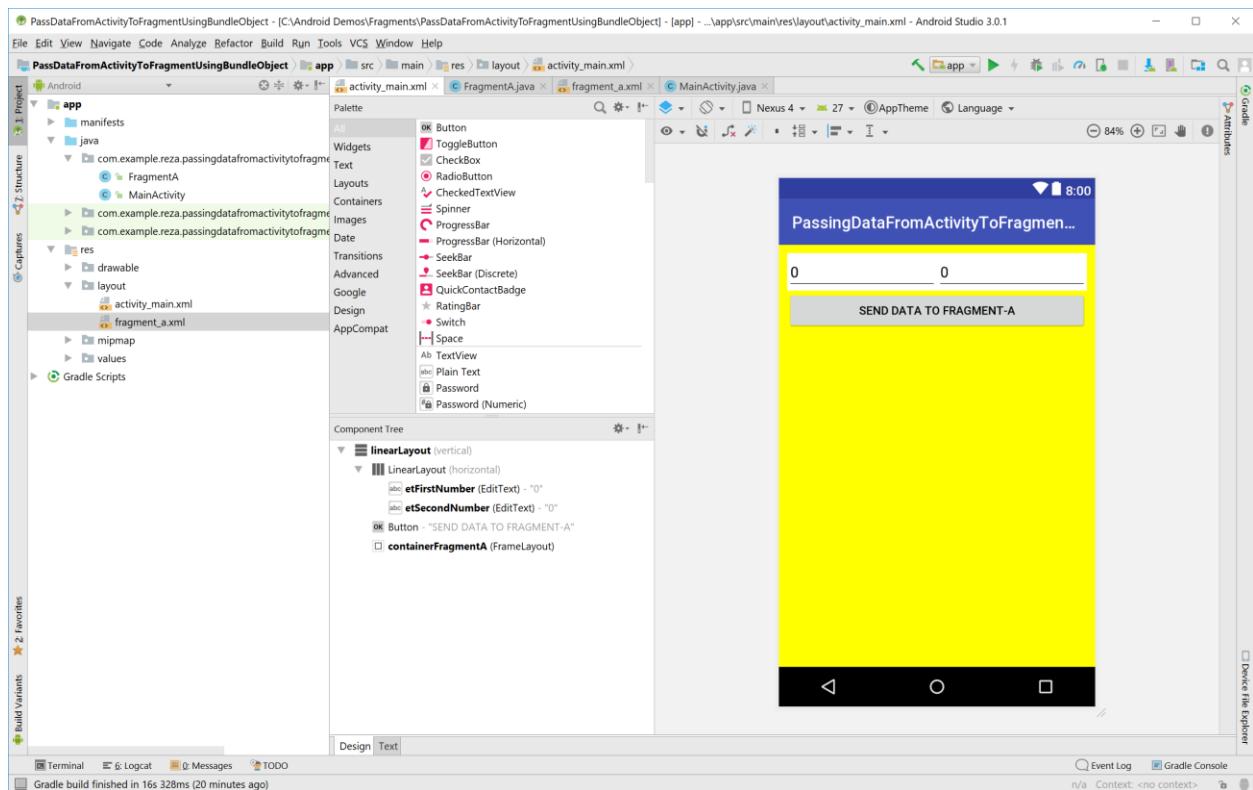
    <EditText
        android:id="@+id/etSecondNumber"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:inputType="number"
        android:text="0"/>

    </LinearLayout>

    <Button
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:onClick="sendDataToFragment"
        android:text="SEND DATA TO FRAGMENT-A"/>

    <FrameLayout
        android:id="@+id/containerFragmentA"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:layout_margin="10dp"/>

```



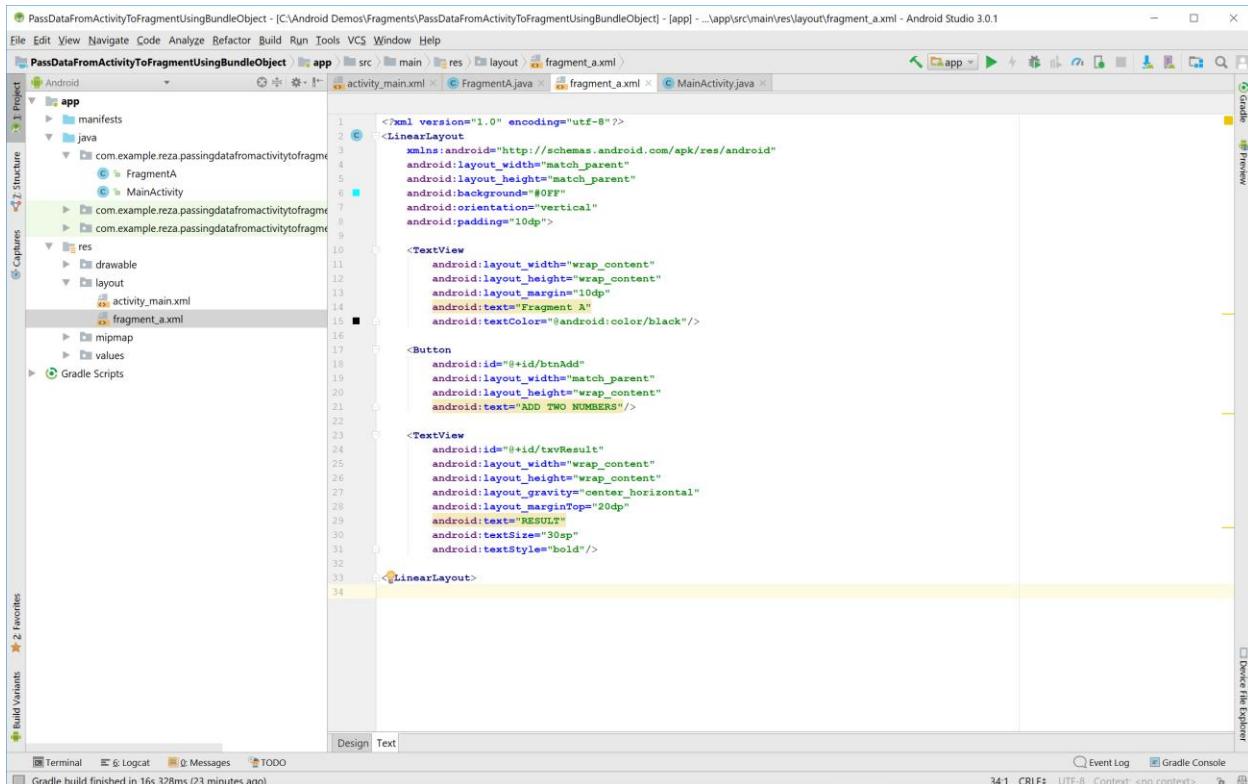
Now change the code for FragmentA.java as shown:

```

1 package com.example.reza.passingdatafromactivitytofragmentusingbundleobject;
2
3 import android.app.Fragment;
4 import android.os.Bundle;
5 import android.view.LayoutInflater;
6 import android.view.View;
7 import android.view.ViewGroup;
8
9 /**
10 * Created by Reza on 2018-03-10.
11 */
12
13 public class FragmentA extends Fragment {
14
15     private static final String TAG = FragmentA.class.getSimpleName();
16
17     @Override
18     public View onCreateView(LayoutInflater inflater, ViewGroup container, Bundle savedInstanceState) {
19
20         View view = inflater.inflate(R.layout.fragment_a, container, false);
21
22         return view;
23     }
24
25 }
26

```

Also modify fragment_a.xml file as shown:



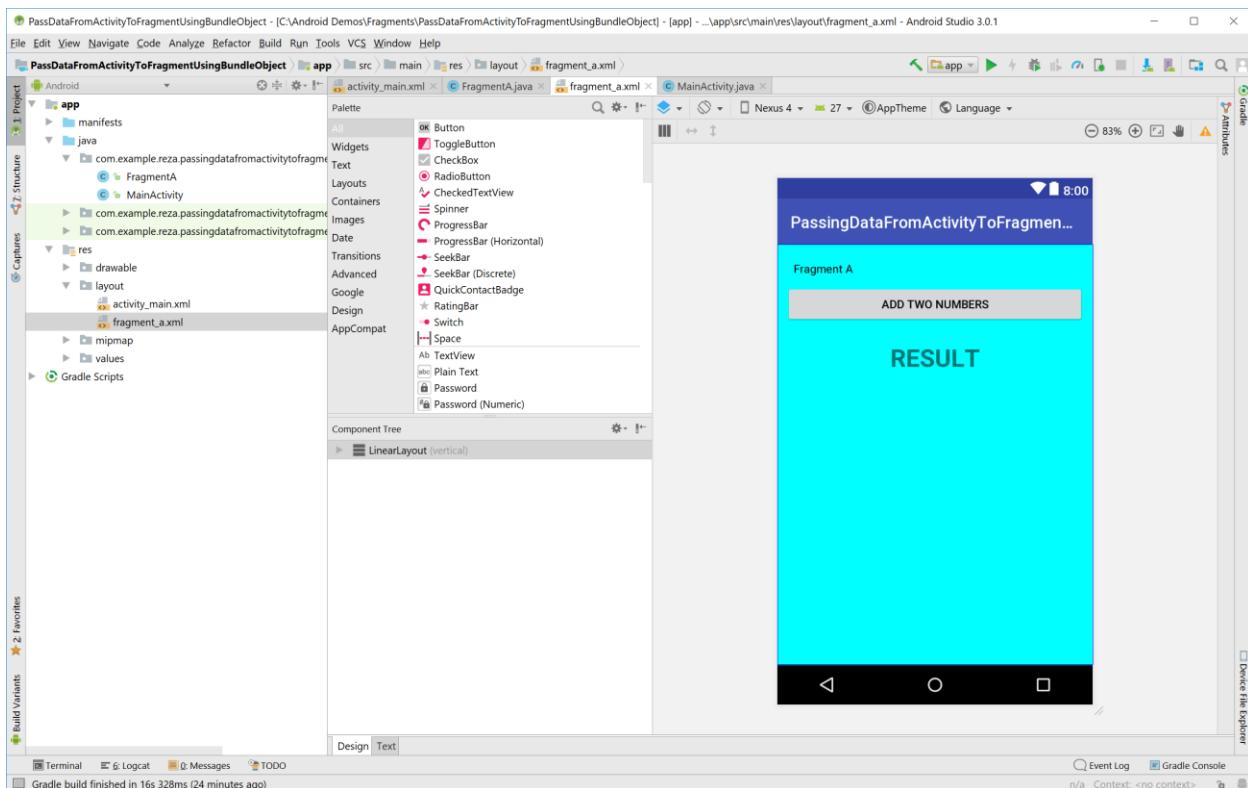
The screenshot shows the Android Studio interface with the project 'PassDataFromActivityToFragmentUsingBundleObject' open. The 'fragment_a.xml' file is selected in the 'res/layout' directory. The code in the Text tab is as follows:

```
<?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="#FFF"
    android:orientation="vertical"
    android:padding="10dp">

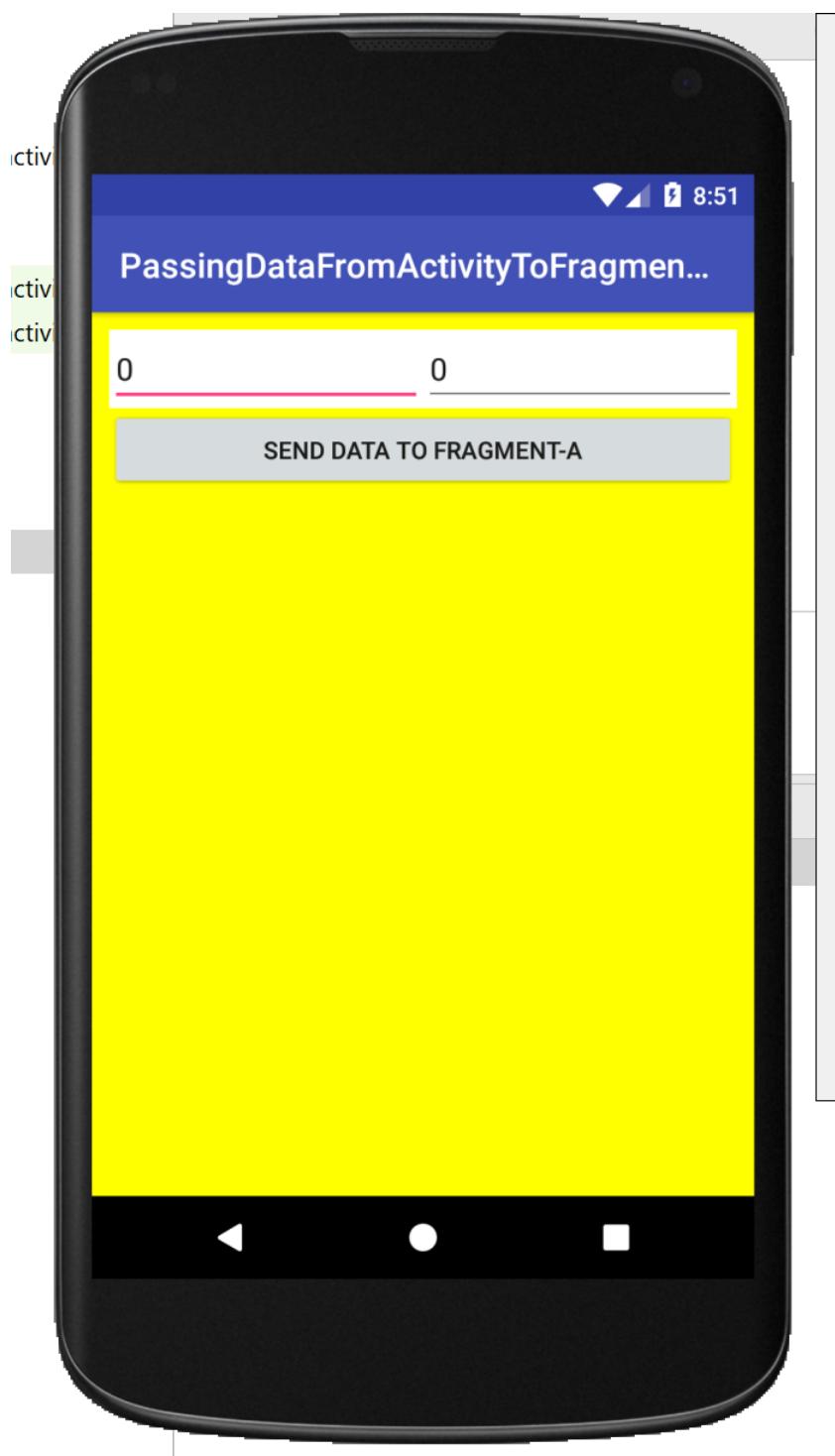
    <TextView
        android:id="@+id/txtResult"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_margin="10dp"
        android:text="Fragment A"
        android:textColor="#android:color/black"/>

    <Button
        android:id="@+id/btnAdd"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="ADD TWO NUMBERS"/>

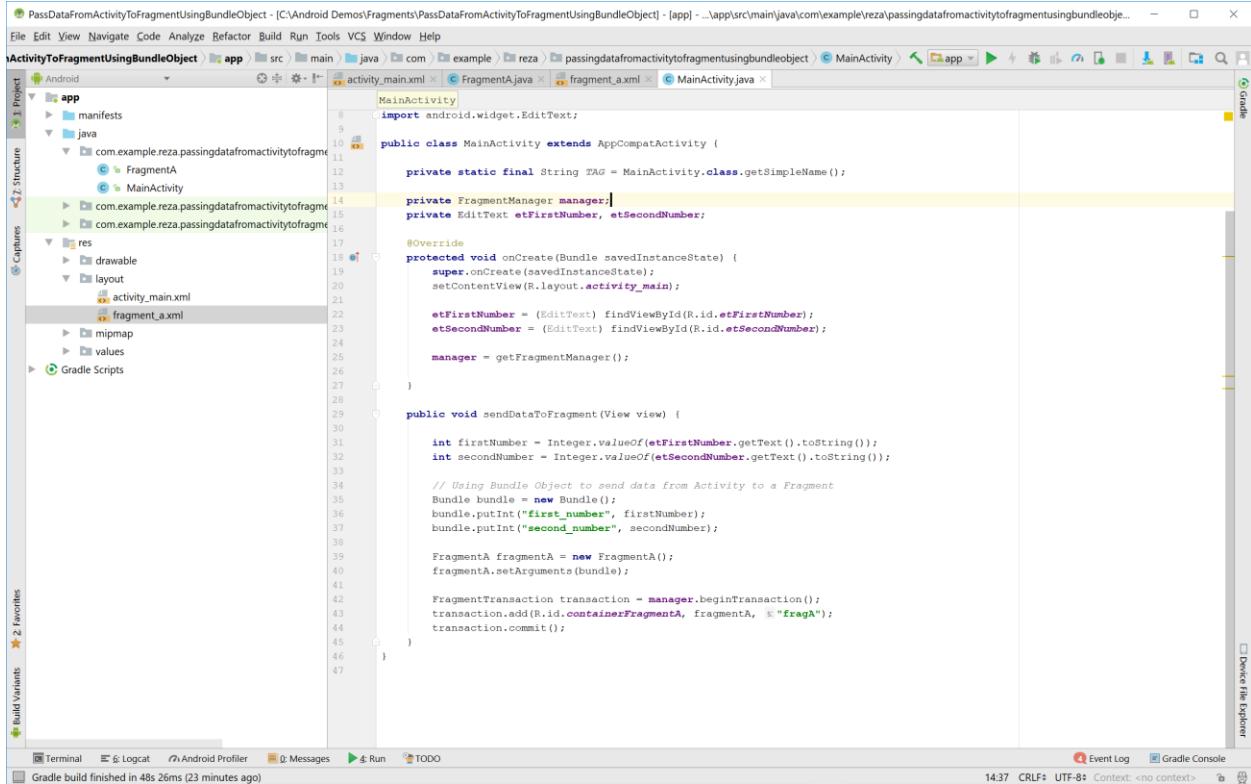
    <TextView
        android:id="@+id/txtResult"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center_horizontal"
        android:layout_marginTop="20dp"
        android:text="RESULT"
        android:textSize="30sp"
        android:textStyle="bold"/>
</LinearLayout>
```



Run the app to make sure everything is okay:

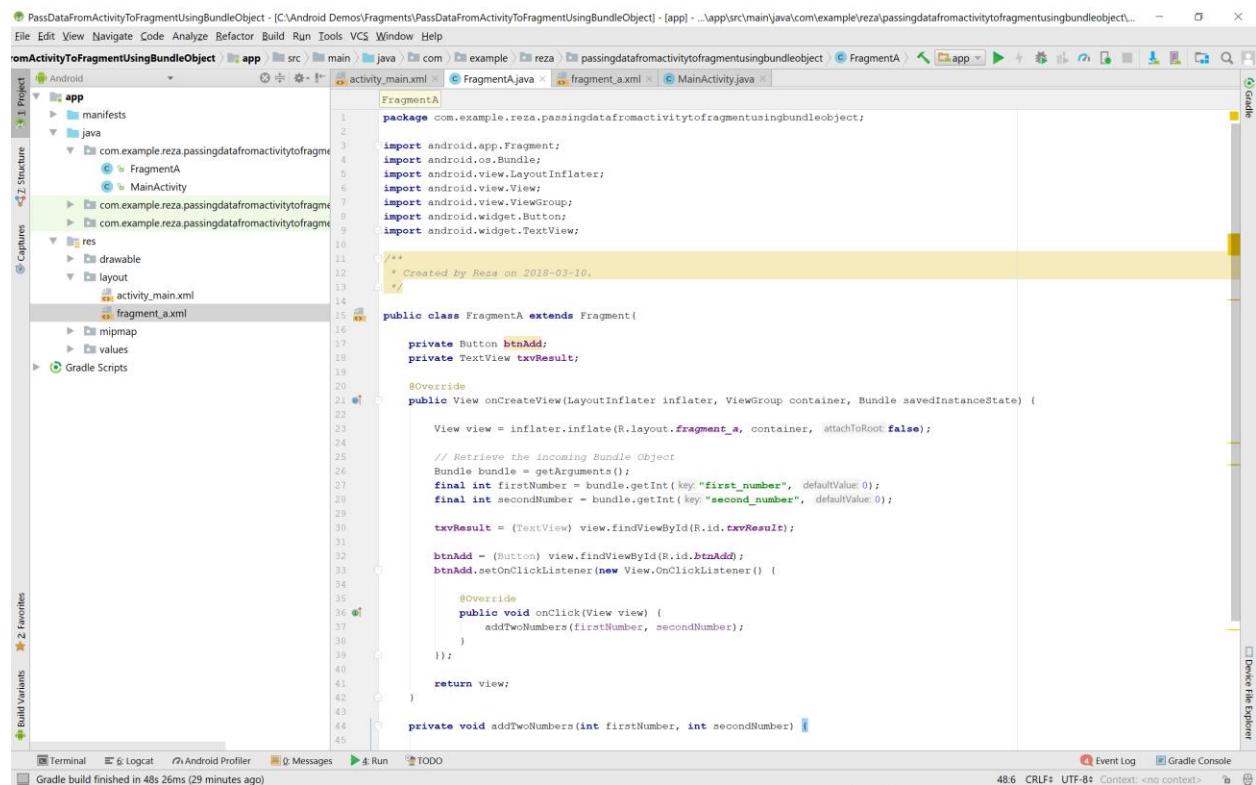


At this point, implement the method “`sendDataToFragment()`” in the `MainActivity.java` as shown:



```
public void sendDataToFragment(View view) {  
  
    int firstNumber = Integer.valueOf(etFirstNumber.getText().toString());  
    int secondNumber = Integer.valueOf(etSecondNumber.getText().toString());  
  
    // Using Bundle Object to send data from Activity to a Fragment  
    Bundle bundle = new Bundle();  
    bundle.putInt("first_number", firstNumber);  
    bundle.putInt("second_number", secondNumber);  
  
    FragmentA fragmentA = new FragmentA();  
    fragmentA.setArguments(bundle);  
  
    FragmentTransaction transaction = manager.beginTransaction();  
    transaction.add(R.id.containerFragmentA, fragmentA, "fragA");  
    transaction.commit();  
}
```

Now if you are sending this “bundle” object to your fragment, then you better write code in FragmentA to retrieve this bundle object so go to FragmentA.java class and modify it as shown:



The screenshot shows the Android Studio interface with the project 'PassDataFromActivityToFragmentUsingBundleObject' open. The FragmentA.java file is selected in the editor. The code is as follows:

```

1 package com.example.reza.passingdatafromactivitytofragmentusingbundleobject;
2
3 import android.app.Fragment;
4 import android.os.Bundle;
5 import android.view.LayoutInflater;
6 import android.view.View;
7 import android.view.ViewGroup;
8 import android.widget.Button;
9 import android.widget.TextView;
10
11 /**
12 * Created by Reza on 2018-03-10.
13 */
14
15 public class FragmentA extends Fragment {
16
17     private Button btnAdd;
18     private TextView txtvResult;
19
20     @Override
21     public View onCreateView(LayoutInflater inflater, ViewGroup container, Bundle savedInstanceState) {
22
23         View view = inflater.inflate(R.layout.fragment_a, container, false);
24
25         // Retrieve the incoming Bundle Object
26         Bundle bundle = getArguments();
27         final int firstNumber = bundle.getInt("first_number", defaultValue: 0);
28         final int secondNumber = bundle.getInt("second_number", defaultValue: 0);
29
30         txtvResult = (TextView) view.findViewById(R.id.txtvResult);
31
32         btnAdd = (Button) view.findViewById(R.id.btnAdd);
33         btnAdd.setOnClickListener(new View.OnClickListener() {
34
35             @Override
36             public void onClick(View view) {
37                 addTwoNumbers(firstNumber, secondNumber);
38             }
39         });
40
41         return view;
42     }
43
44     private void addTwoNumbers(int firstNumber, int secondNumber) {
45
46
47     }
48 }

```

The screenshot shows the Android Studio interface with the project 'PassDataFromActivityToFragmentUsingBundleObject' open. The code editor displays the FragmentA.java file, which contains the following code:

```
public class FragmentA extends Fragment {
    private Button btnAdd;
    private TextView txvResult;

    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container, Bundle savedInstanceState) {
        View view = inflater.inflate(R.layout.fragment_a, container, false);

        // Retrieve the incoming Bundle Object
        Bundle bundle = getArguments();
        final int firstNumber = bundle.getInt(key.first_number, defaultValue: 0);
        final int secondNumber = bundle.getInt(key.second_number, defaultValue: 0);

        txvResult = (TextView) view.findViewById(R.id.txvResult);

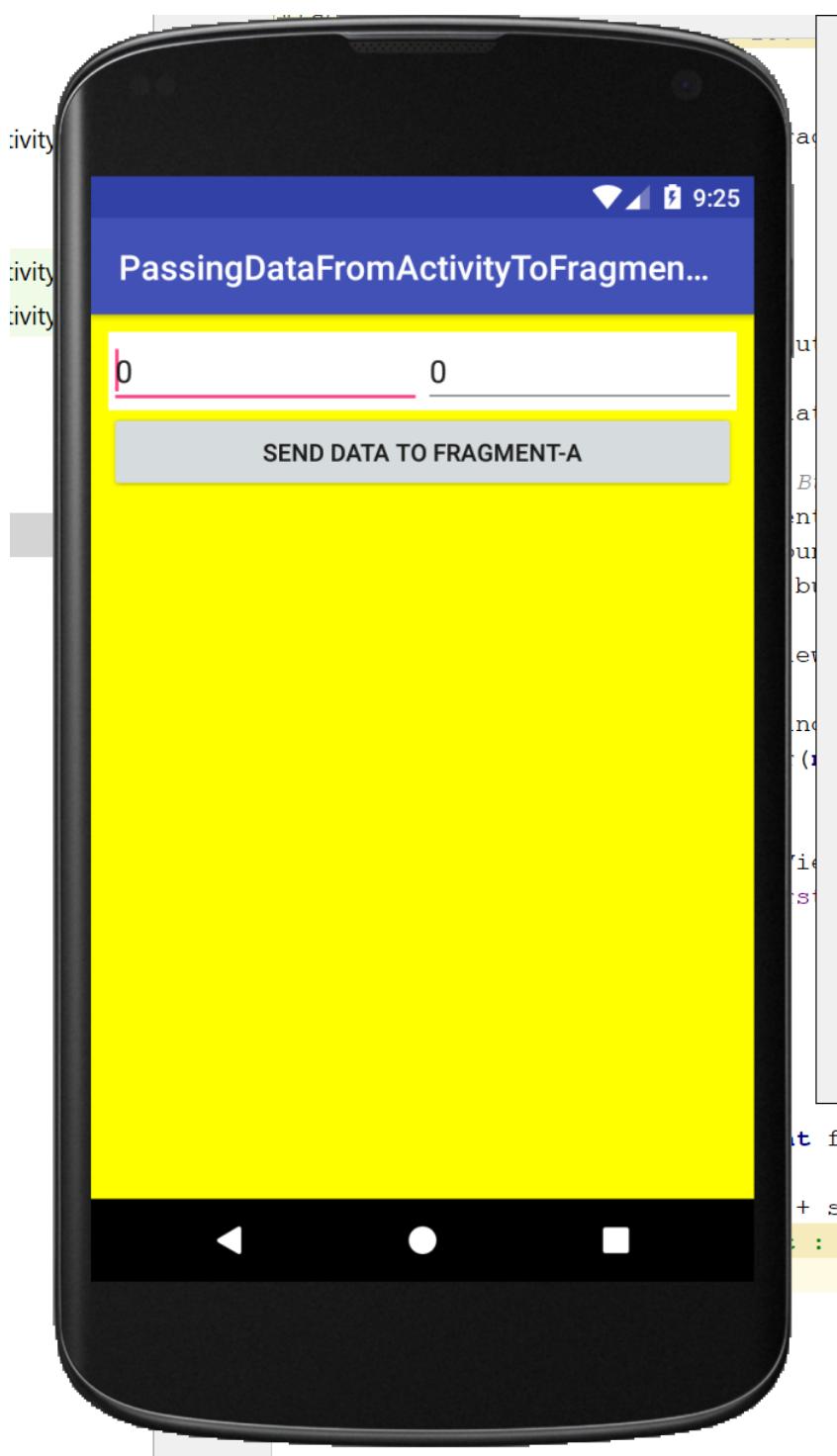
        btnAdd = (Button) view.findViewById(R.id.btnAdd);
        btnAdd.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                addTwoNumbers(firstNumber, secondNumber);
            }
        });

        return view;
    }

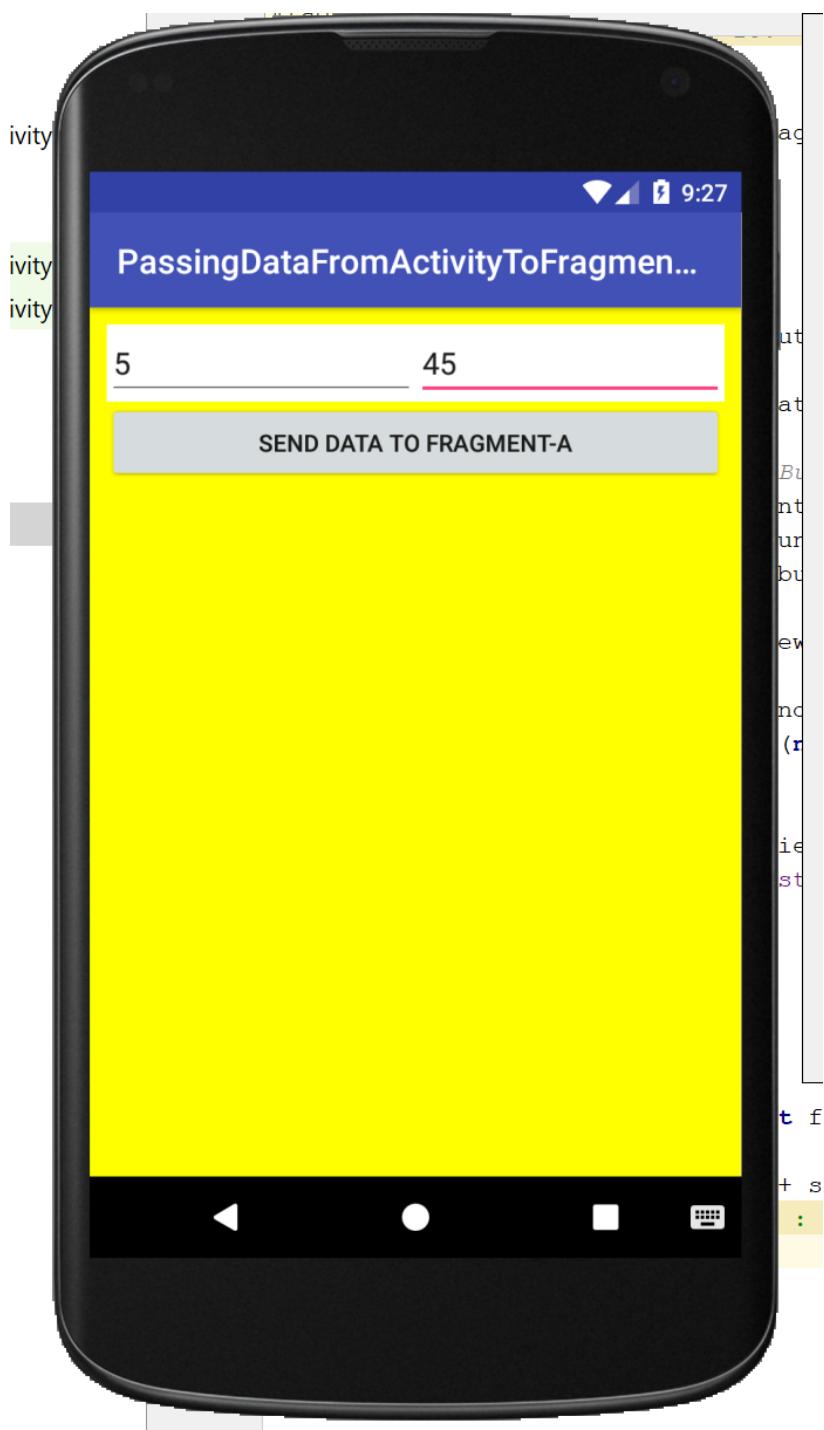
    private void addTwoNumbers(int firstNumber, int secondNumber) {
        int result = firstNumber + secondNumber;
        txvResult.setText("Result : " + result);
    }
}
```

The code implements a FragmentA class that inflates a layout (fragment_a.xml) and handles button clicks to add two numbers from a Bundle argument.

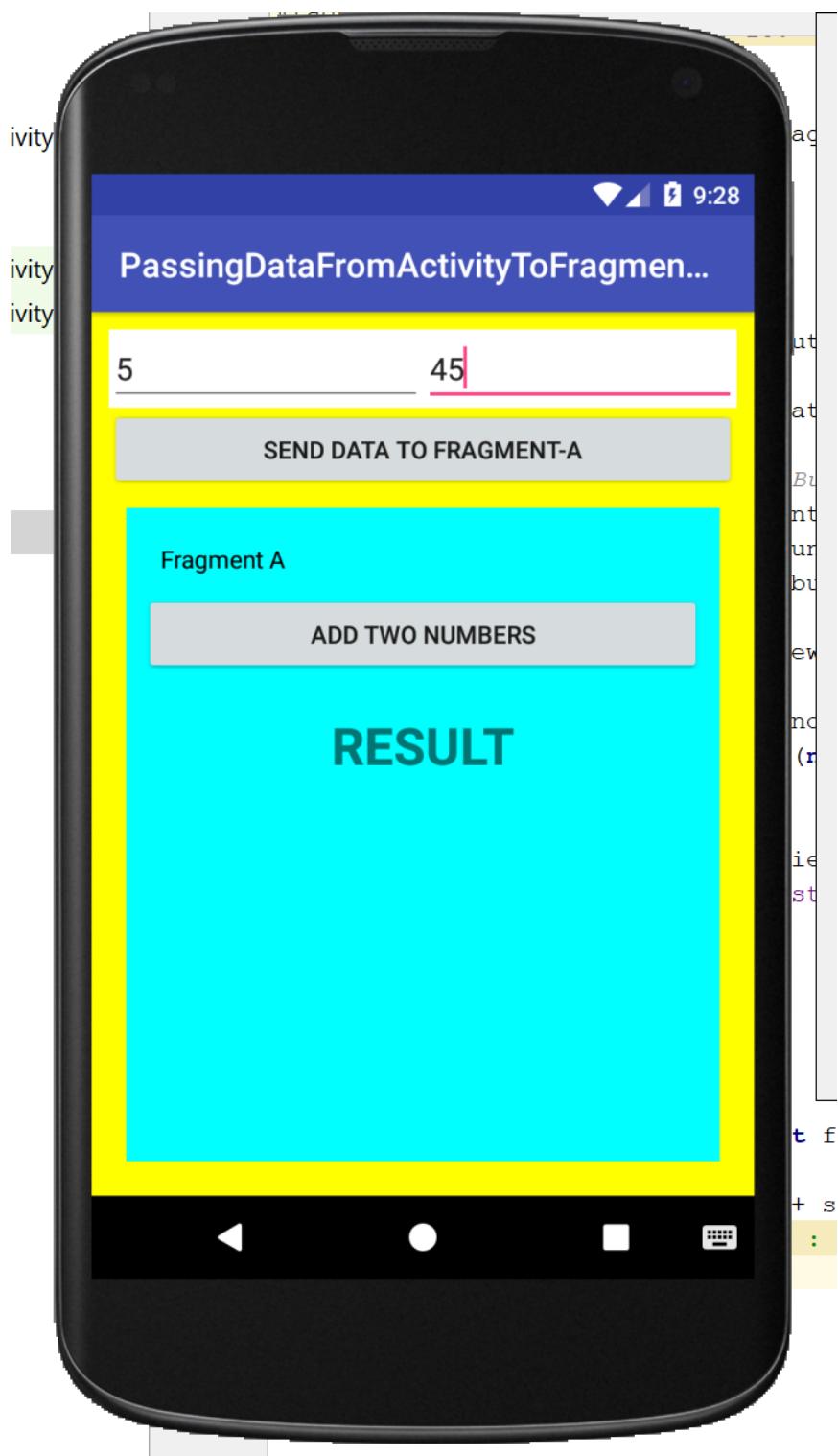
Now run the app:



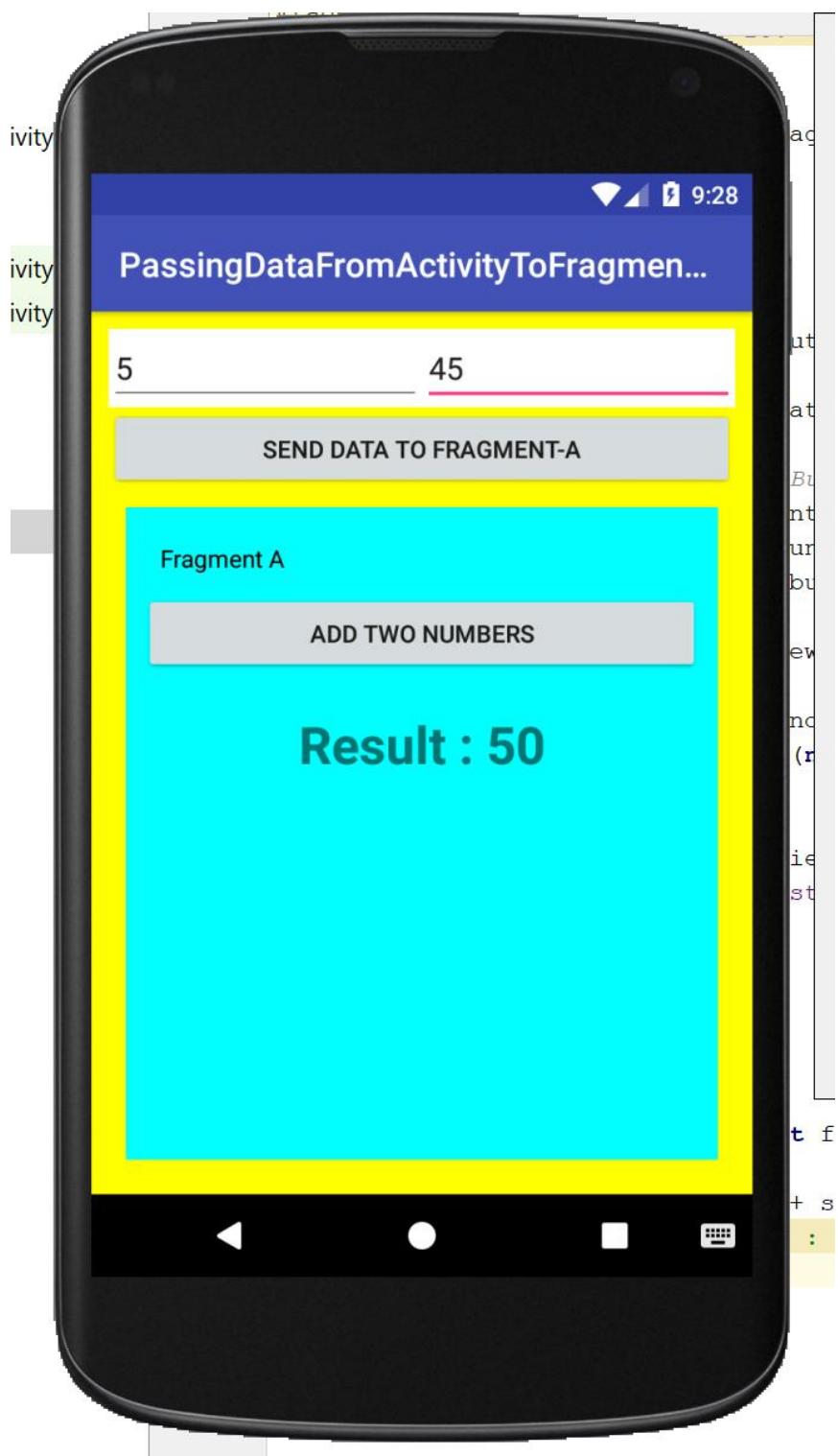
Type two numbers:



Click “Send data to Fragment A” button:



Now in Fragment A click “Add two numbers” button:



And you have your result displayed in the Fragment.