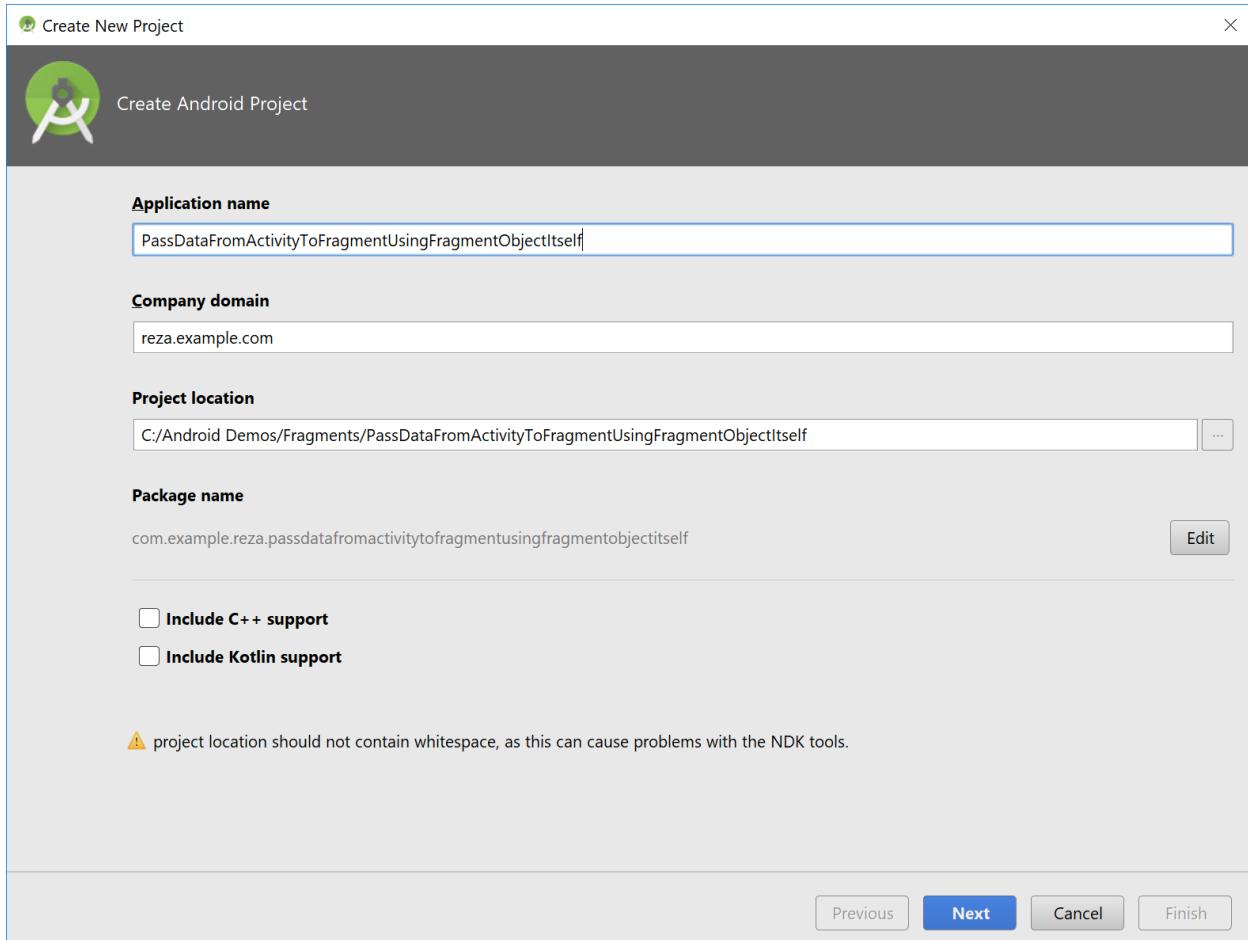


Passing Data from the Activity to the Fragment using the Fragment Object itself

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

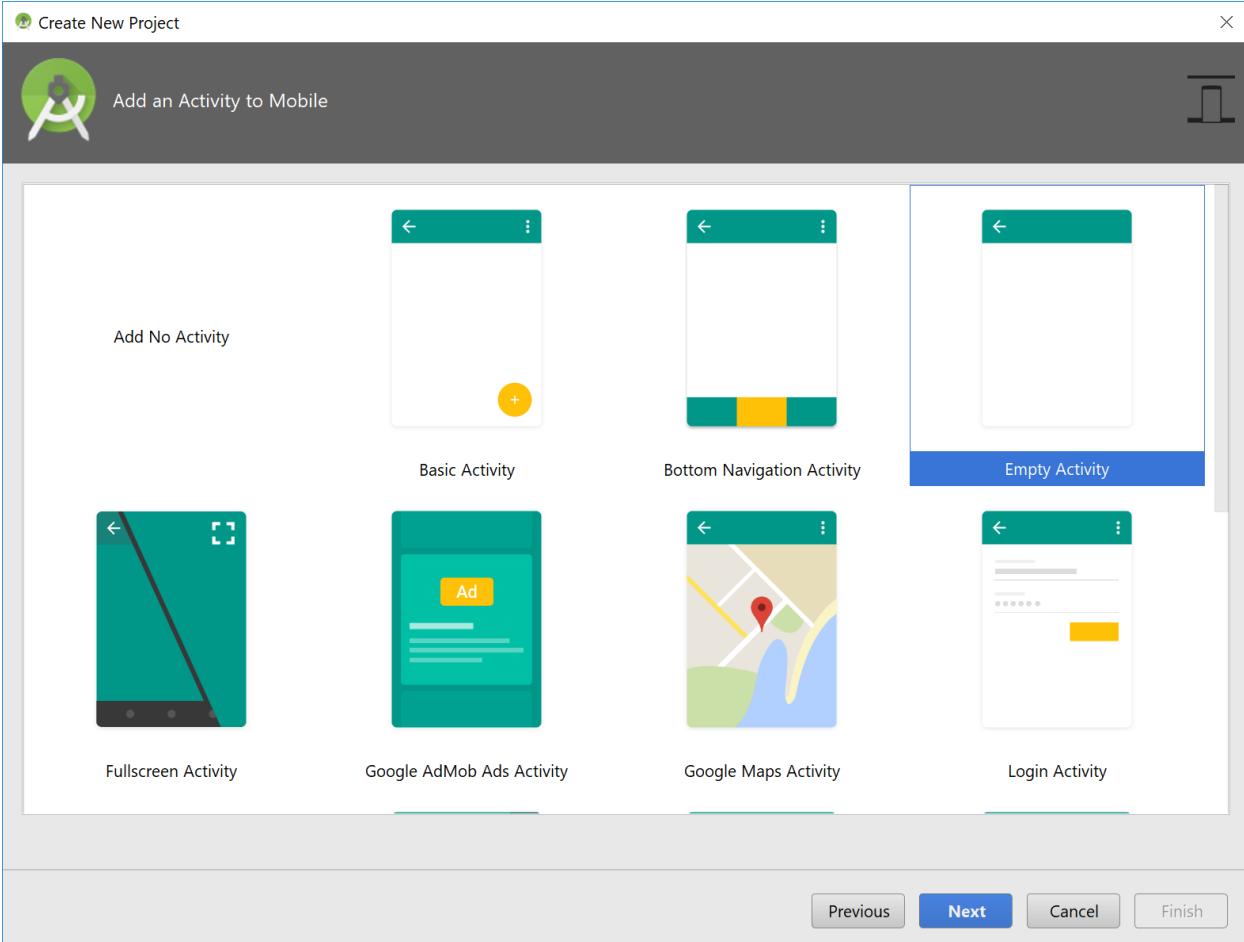
Wear
API 21: Android 5.0 (Lollipop) ▼

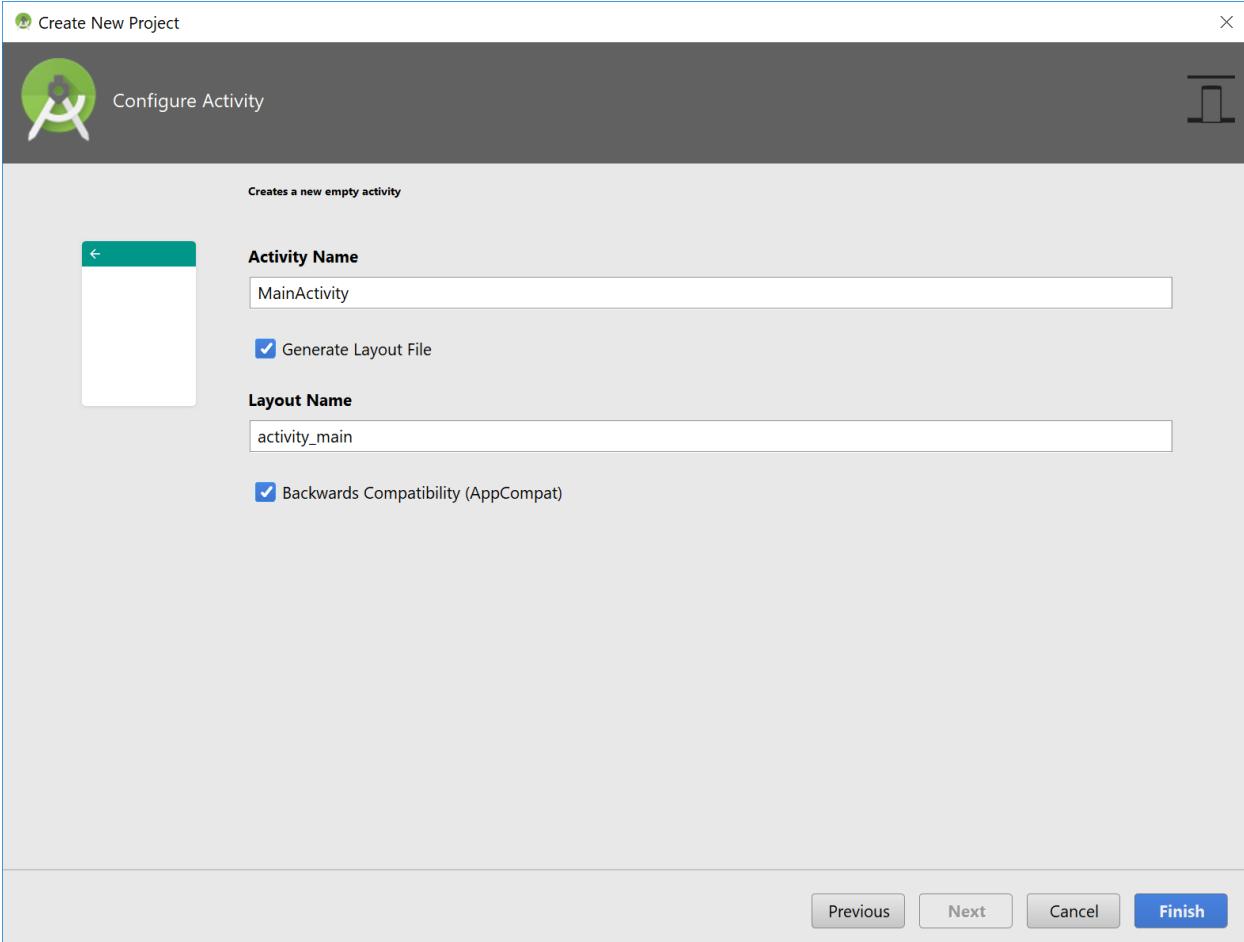
TV
API 21: Android 5.0 (Lollipop) ▼

Android Auto

Android Things
API 24: Android 7.0 (Nougat) ▼

Previous Next Cancel Finish



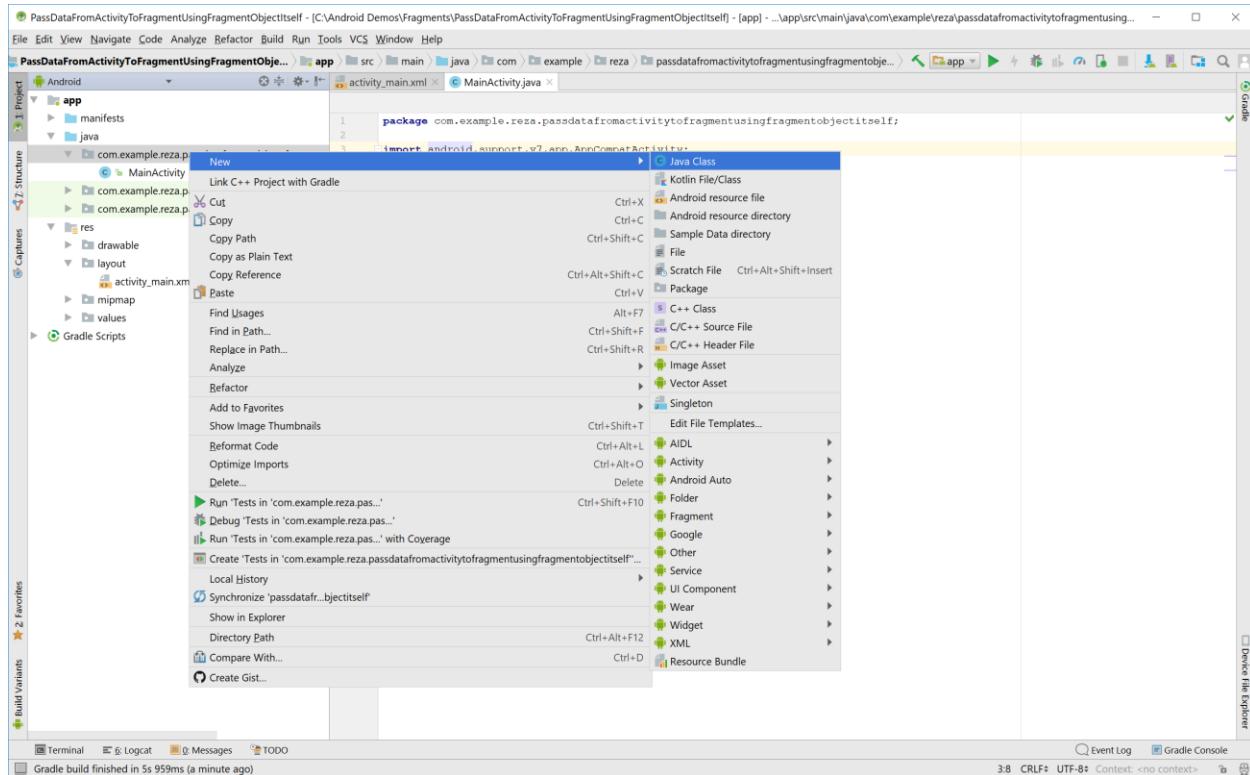


```

1 package com.example.reza.passdatafromactivitytofragmentusingfragmentobjectitself;
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 }
14

```

Now add a fragment as shown:





Create New Class



Name:	FragmentA		
Kind:	<input checked="" type="radio"/> Class 		
Superclass:			
Interface(s):			
Package:	com.example.reza.passdatafromactivitytofragmentusingfragmentobjectitself		
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
 <input type="checkbox"/> Show Select Overrides Dialog			
<input type="button" value="OK"/> <input type="button" value="Cancel"/> <input type="button" value="Help"/>			

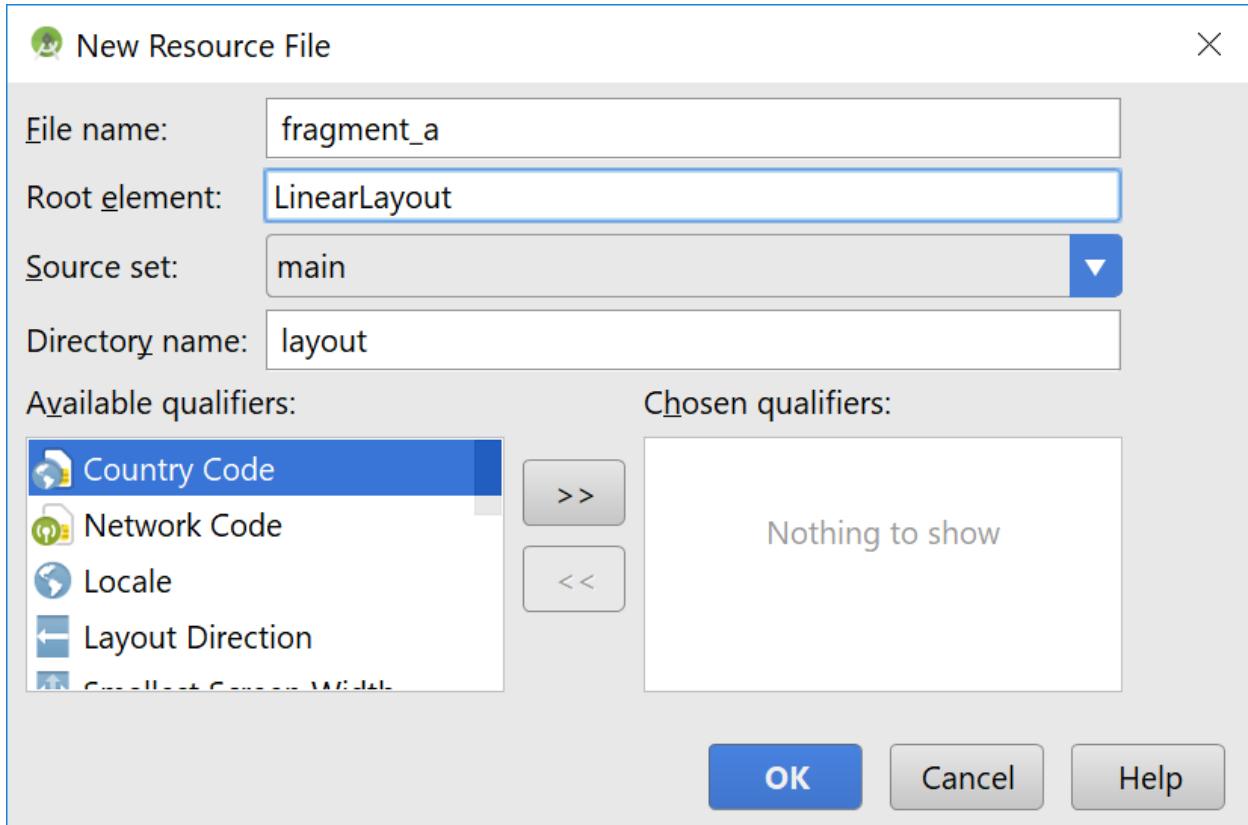
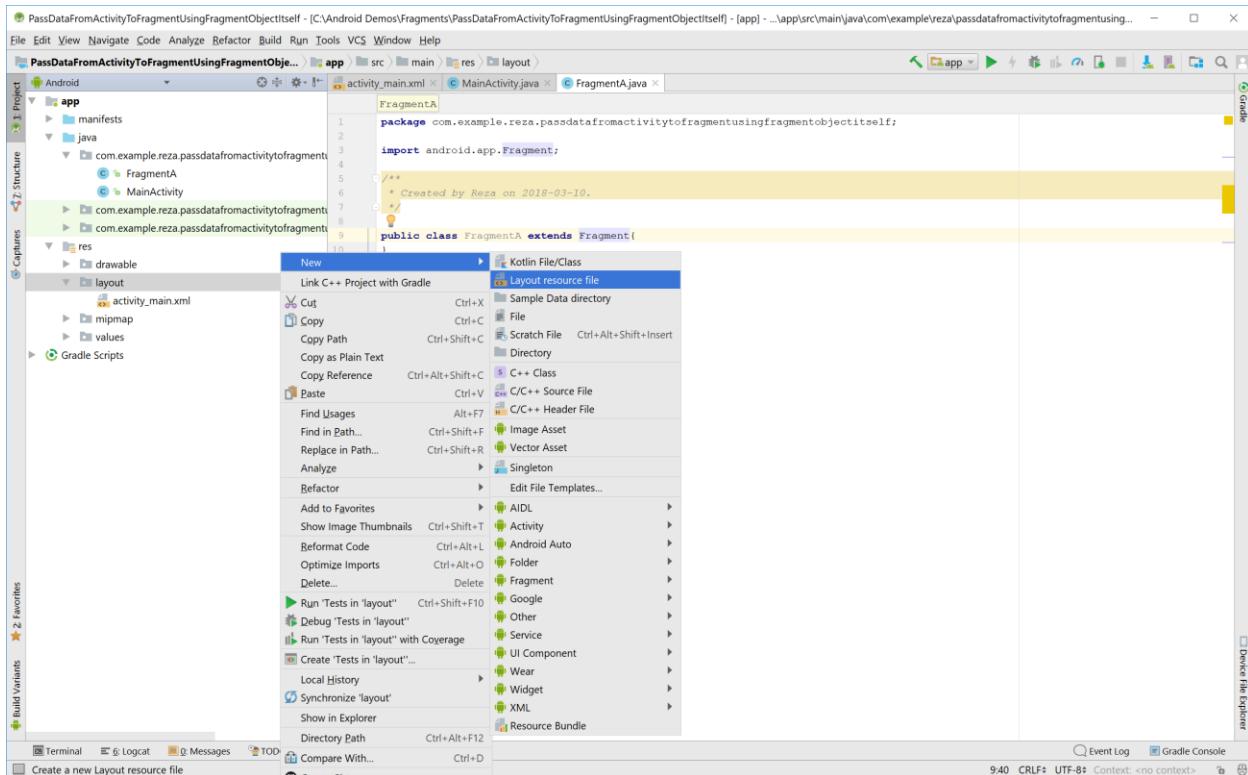
Screenshot of Android Studio showing the FragmentA.java code. The code defines a class FragmentA that extends Fragment. It includes a package declaration, imports, a detailed comment, and a constructor.

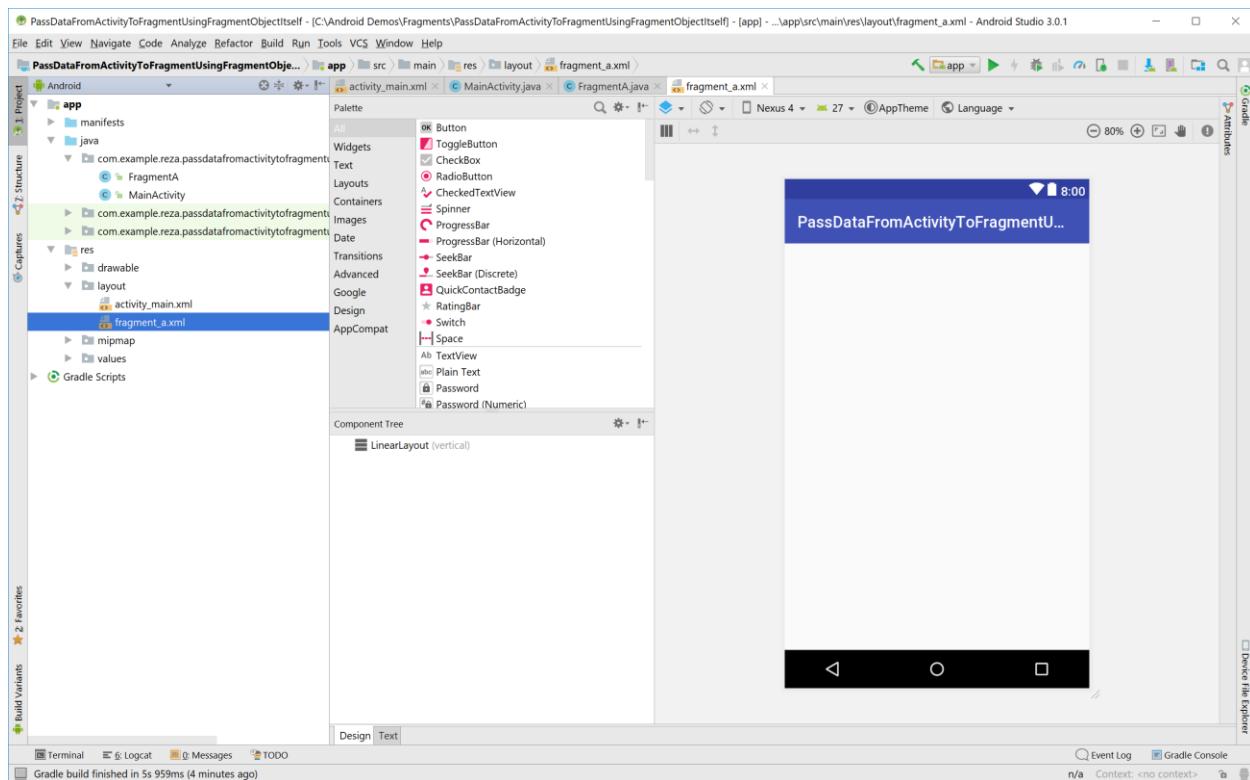
```
FragmentA
package com.example.reza.passdatafromactivitytofragmentusingfragmentobjectitself;
import android.app.Fragment;
/**
 * Created by Reza on 2018-03-10.
 */
public class FragmentA extends Fragment {
```

Screenshot of Android Studio showing the FragmentA.java code after adding a constructor. The constructor now takes a parameter of type FragmentActivity.

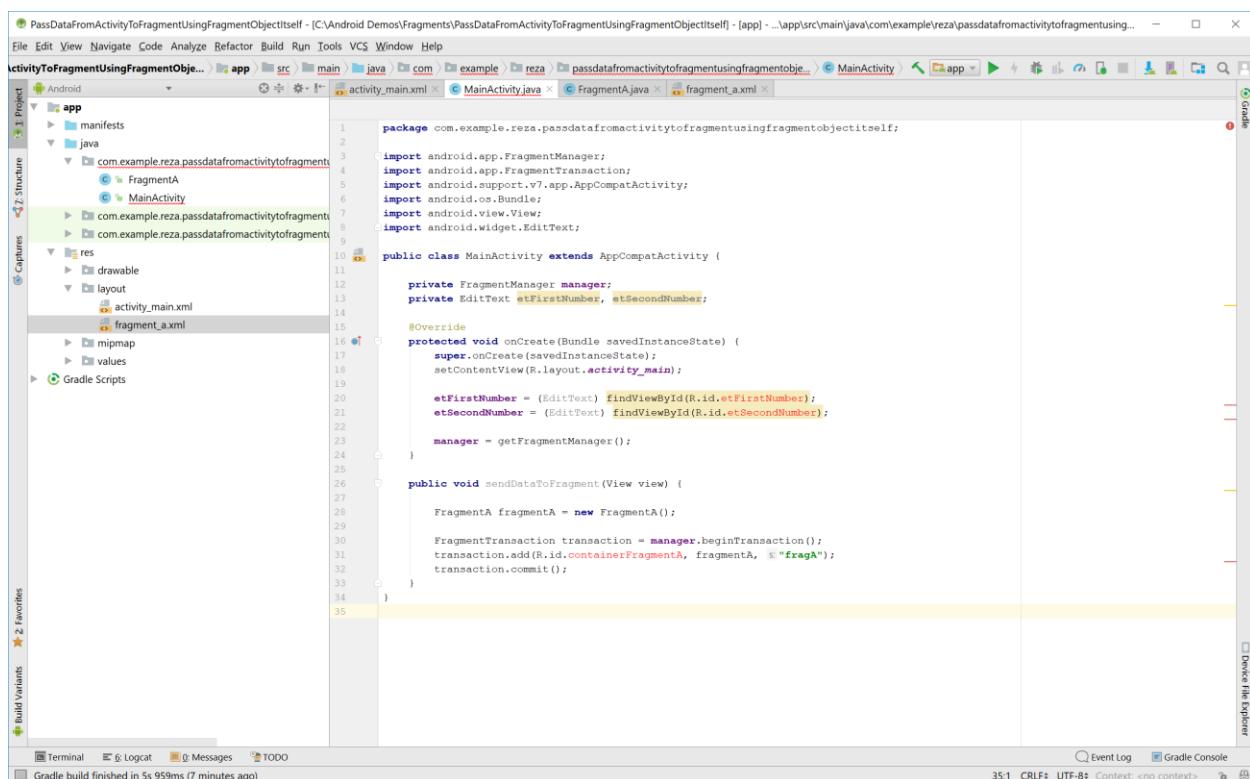
```
FragmentA
package com.example.reza.passdatafromactivitytofragmentusingfragmentobjectitself;
import android.app.Fragment;
/**
 * Created by Reza on 2018-03-10.
 */
public class FragmentA extends Fragment {  
    public FragmentA(FragmentActivity activity) {
```

Next create a layout for your fragment class as shown:

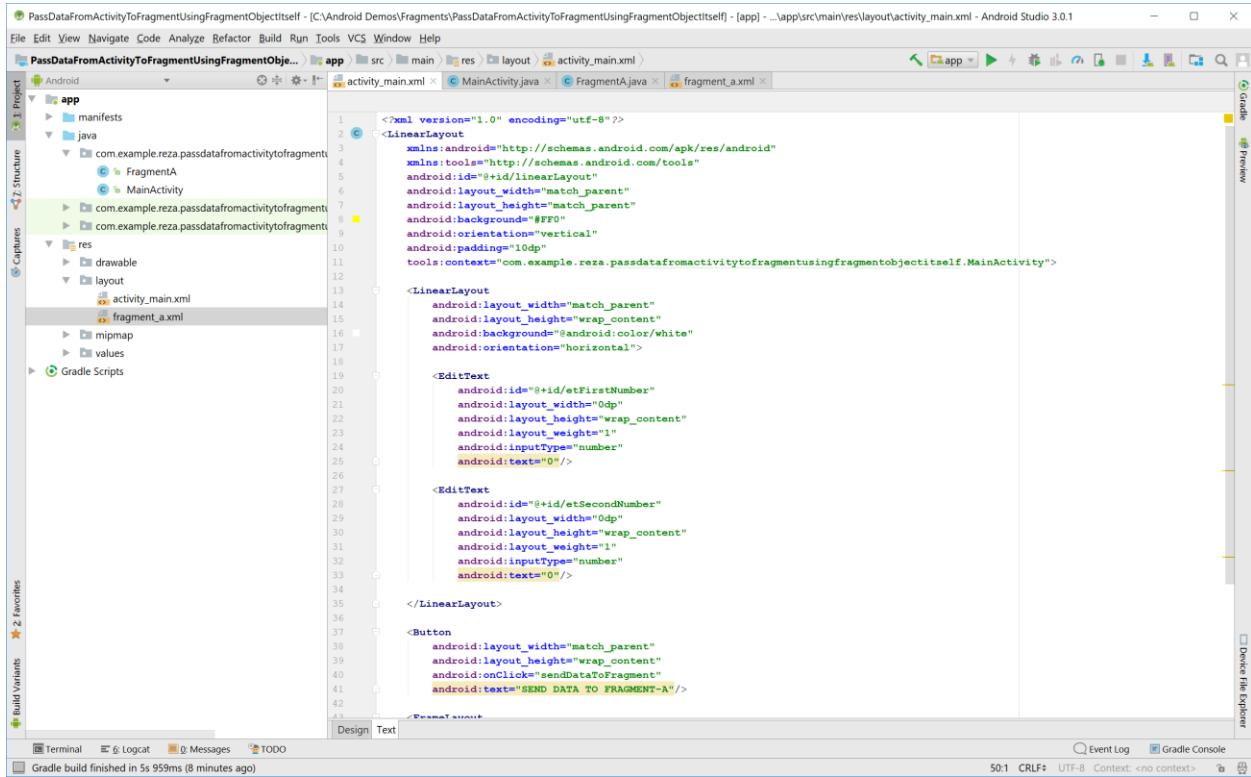




Now modify MainActivity.java as shown:



And modify its layout file (activity_main.xml file) as shown:

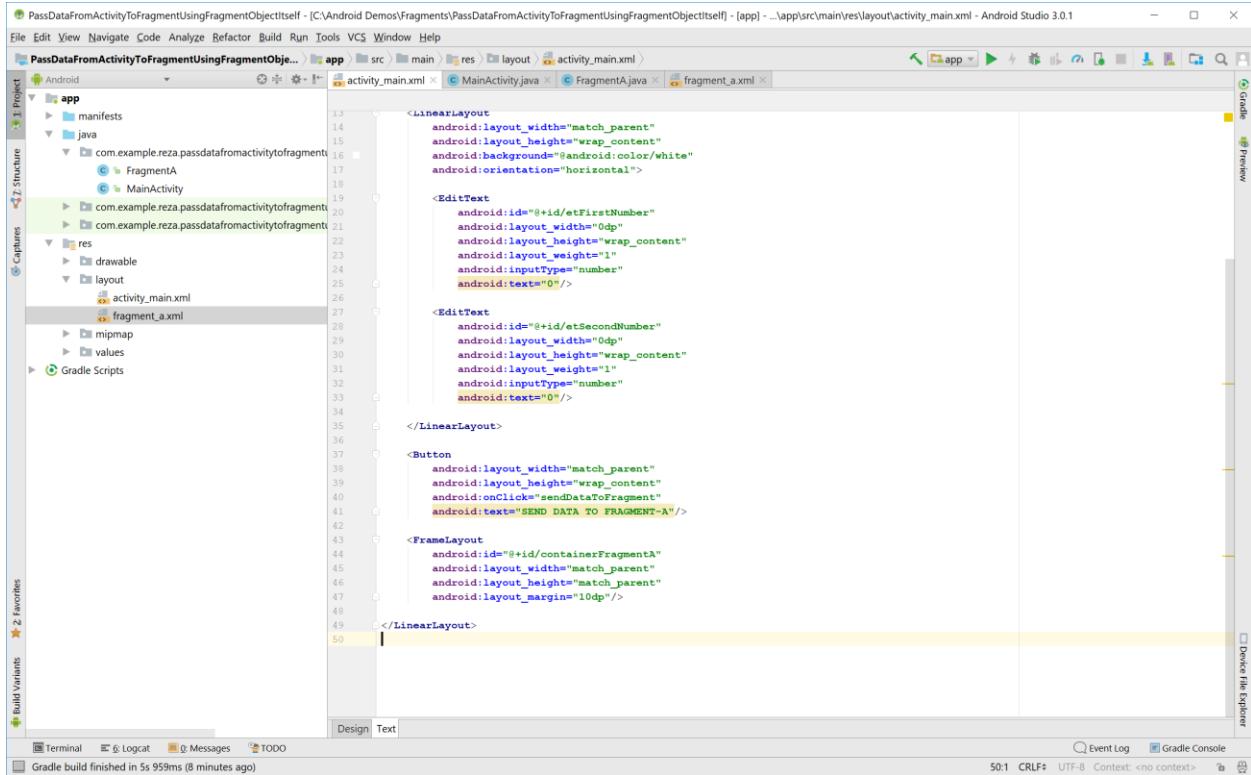


The screenshot shows the Android Studio interface with the project navigation bar at the top. Below it, the 'app' module is selected in the Project tab. In the 'layout' folder, the 'activity_main.xml' file is open in the center pane. The code editor displays the XML layout structure:

```
<?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.passdatafromactivitytofragment.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"/>
    </EditText>
    <Button
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:onClick="sendDataToFragment"
        android:text="SEND DATA TO FRAGMENT-A"/>
</LinearLayout>
```

The bottom status bar indicates a successful Gradle build.



This screenshot shows the same Android Studio environment after modifications. The 'activity_main.xml' file now includes a FrameLayout element:

```
<?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.passdatafromactivitytofragment.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"/>
    </EditText>
    <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"/>
</LinearLayout>
```

The bottom status bar indicates a successful Gradle build.

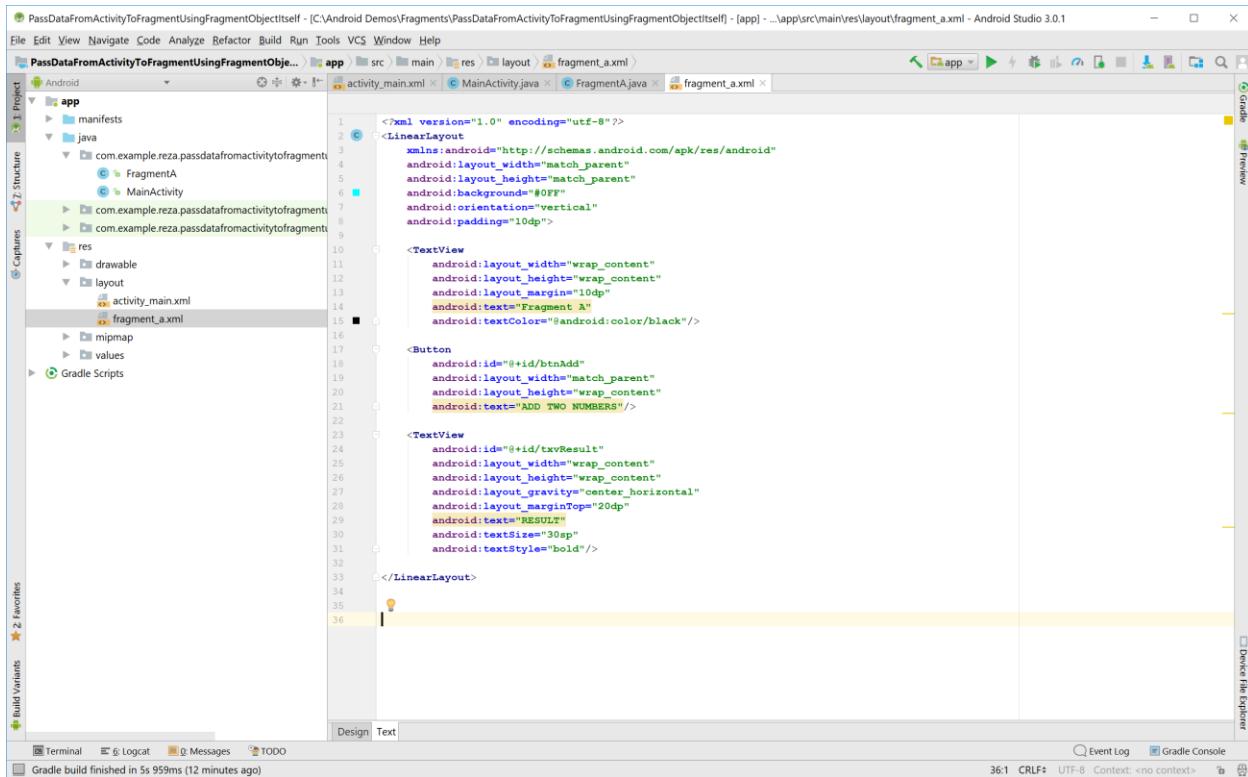
Now modify FragmentA.java as shown:

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

```
1 package com.example.reza.passdatafromactivitytofragmentusingfragmentobjectitself;
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 txvResult;
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         txvResult = (TextView) view.findViewById(R.id.txvResult);
26
27         btnAdd = (Button) view.findViewById(R.id.btnAdd);
28         btnAdd.setOnClickListener(new View.OnClickListener() {
29
30             @Override
31             public void onClick(View view) {
32                 }
33             });
34
35         return view;
36     }
37 }
38
```

The code editor has syntax highlighting and code completion features. The bottom status bar shows 'Gradle build finished in 5s 959ms (11 minutes ago)'.

And modify its layout file (fragment_a.xml file) as shown:



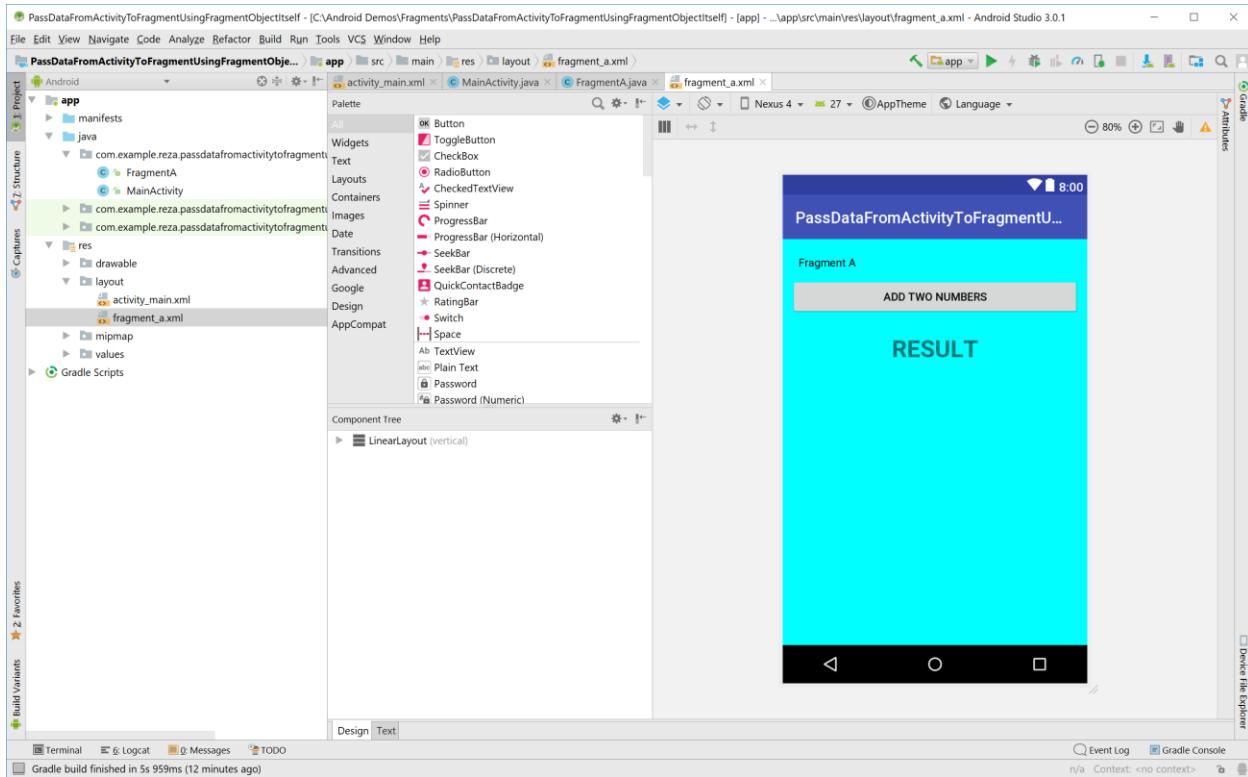
```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="#00FF00"
    android:orientation="vertical"
    android:padding="10dp">

    <TextView
        android:id="@+id/txtFragmentA"
        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"/>

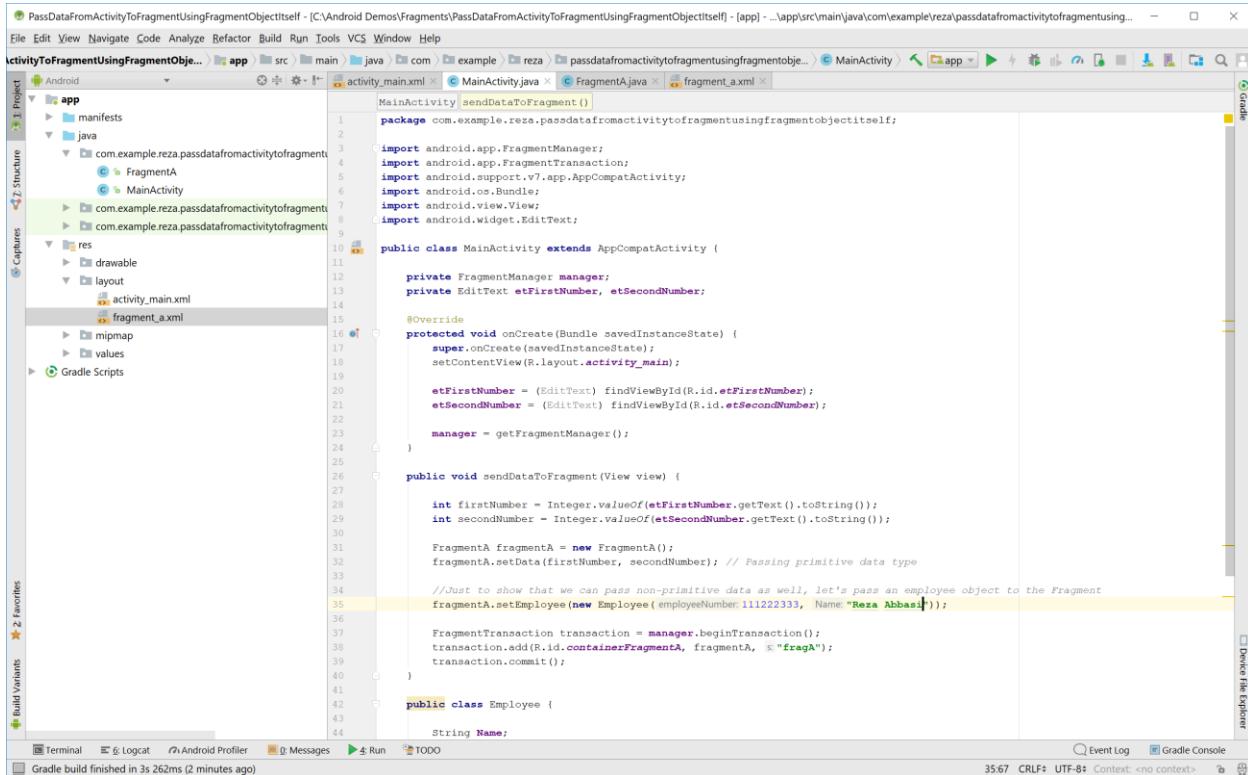
</LinearLayout>
```



Now we are going to modify our `MainActivity.java` and our `FragmentA.java` so we can send data from the activity to the fragment.

In this second method, we are simply going to call a method in the `FragmentA` class (we have to define and implement this method ourselves).

Modify the `MainActivity.java` as shown:



The screenshot shows the Android Studio interface with the project 'PassDataFromActivityToFragmentUsingFragmentObjectItself' open. The code editor displays `MainActivity.java`. The code implements a `sendDataToFragment` method that creates a new `FragmentA` instance and passes primitive data types (firstNumber and secondNumber) to it. It then adds the fragment to the current transaction. The `Employee` class is defined at the bottom of the file.

```
1 package com.example.reza.passdatafromactivitytofragmentusingfragmentobjectitself;
2
3 import android.app.FragmentManager;
4 import android.app.FragmentTransaction;
5 import android.support.v7.app.AppCompatActivity;
6 import android.os.Bundle;
7 import android.view.View;
8 import android.widget.EditText;
9
10 public class MainActivity extends AppCompatActivity {
11
12     private FragmentManager manager;
13     private EditText etFirstNumber, etSecondNumber;
14
15     @Override
16     protected void onCreate(Bundle savedInstanceState) {
17         super.onCreate(savedInstanceState);
18         setContentView(R.layout.activity_main);
19
20         etFirstNumber = (EditText) findViewById(R.id.etFirstNumber);
21         etSecondNumber = (EditText) findViewById(R.id.etSecondNumber);
22
23         manager = getFragmentManager();
24     }
25
26     public void sendDataToFragment(View view) {
27
28         int firstNumber = Integer.valueOf(etFirstNumber.getText().toString());
29         int secondNumber = Integer.valueOf(etSecondNumber.getText().toString());
30
31         FragmentA fragmentA = new FragmentA();
32         fragmentA.setdata(firstNumber, secondNumber); // Passing primitive data type
33
34         //Just to show that we can pass non-primitive data as well, let's pass an employee object to the Fragment
35         fragmentA.setEmployee(new Employee(employeeNumber:111222333, Name: "Reza Abbas"));
36
37         FragmentTransaction transaction = manager.beginTransaction();
38         transaction.add(R.id.containerFragmentA, fragmentA, "fragA");
39         transaction.commit();
40     }
41
42     public class Employee {
43
44         String Name;
```

```

    package com.example.reza.passdatafromactivitytofragmentusingfragmentobjectitself;
    import android.os.Bundle;
    import android.view.LayoutInflater;
    import android.view.View;
    import android.view.ViewGroup;
    import android.widget.Button;
    import android.widget.TextView;
    import androidx.fragment.app.Fragment;
    import androidx.fragment.app.FragmentManager;
    import androidx.fragment.app.FragmentTransaction;
    import androidx.appcompat.app.AppCompatActivity;
    import java.util.ArrayList;
    import java.util.List;

    public class FragmentA extends Fragment {
        private Button btnAdd;
        private TextView txtResult;
        private int firstNumber = 0;
        private int secondNumber = 0;

        private MainActivity.Employee employee;

        @Override
        public View onCreateView(LayoutInflater inflater, ViewGroup container, Bundle savedInstanceState) {
            View view = inflater.inflate(R.layout.fragment_a, container, false);
            txtResult = (TextView) view.findViewById(R.id.txtResult);
            btnAdd = (Button) view.findViewById(R.id.btnAdd);
            btnAdd.setOnClickListener(new View.OnClickListener() {
                @Override
                public void onClick(View view) {
                    addTwoNumbers(firstNumber, secondNumber);
                    setEmployee(employee);
                }
            });
            return view;
        }

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

        public void setEmployee(MainActivity.Employee employee) {
            this.employee = employee;
        }
    }

```

Now modify the FragmentA.java as shown:

```

    package com.example.reza.passdatafromactivitytofragmentusingfragmentobjectitself;
    import android.os.Bundle;
    import android.view.LayoutInflater;
    import android.view.View;
    import android.view.ViewGroup;
    import android.widget.Button;
    import android.widget.TextView;
    import androidx.fragment.app.Fragment;
    import androidx.fragment.app.FragmentManager;
    import androidx.fragment.app.FragmentTransaction;
    import androidx.appcompat.app.AppCompatActivity;
    import java.util.ArrayList;
    import java.util.List;

    public class FragmentA extends Fragment {
        /**
         * Created by Reza on 2018-03-10.
         */
        private Button btnAdd;
        private TextView txtResult;
        private int firstNumber = 0;
        private int secondNumber = 0;

        private MainActivity.Employee employee;

        @Override
        public View onCreateView(LayoutInflater inflater, ViewGroup container, Bundle savedInstanceState) {
            View view = inflater.inflate(R.layout.fragment_a, container, false);
            txtResult = (TextView) view.findViewById(R.id.txtResult);
            btnAdd = (Button) view.findViewById(R.id.btnAdd);
            btnAdd.setOnClickListener(new View.OnClickListener() {
                @Override
                public void onClick(View view) {
                    addTwoNumbers(firstNumber, secondNumber);
                    setEmployee(employee);
                }
            });
            return view;
        }

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

        public void setEmployee(MainActivity.Employee employee) {
            this.employee = employee;
        }
    }

```

The screenshot shows the Android Studio interface with the project 'PassDataFromActivityToFragmentUsingFragmentObjectItself' open. The code editor displays `FragmentA.java` which contains the following Java code:

```
private int firstNumber = 0;
private int secondNumber = 0;

private MainActivity.Employee employee;

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

    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);
            setEmployee(employee);
        }
    });

    return view;
}

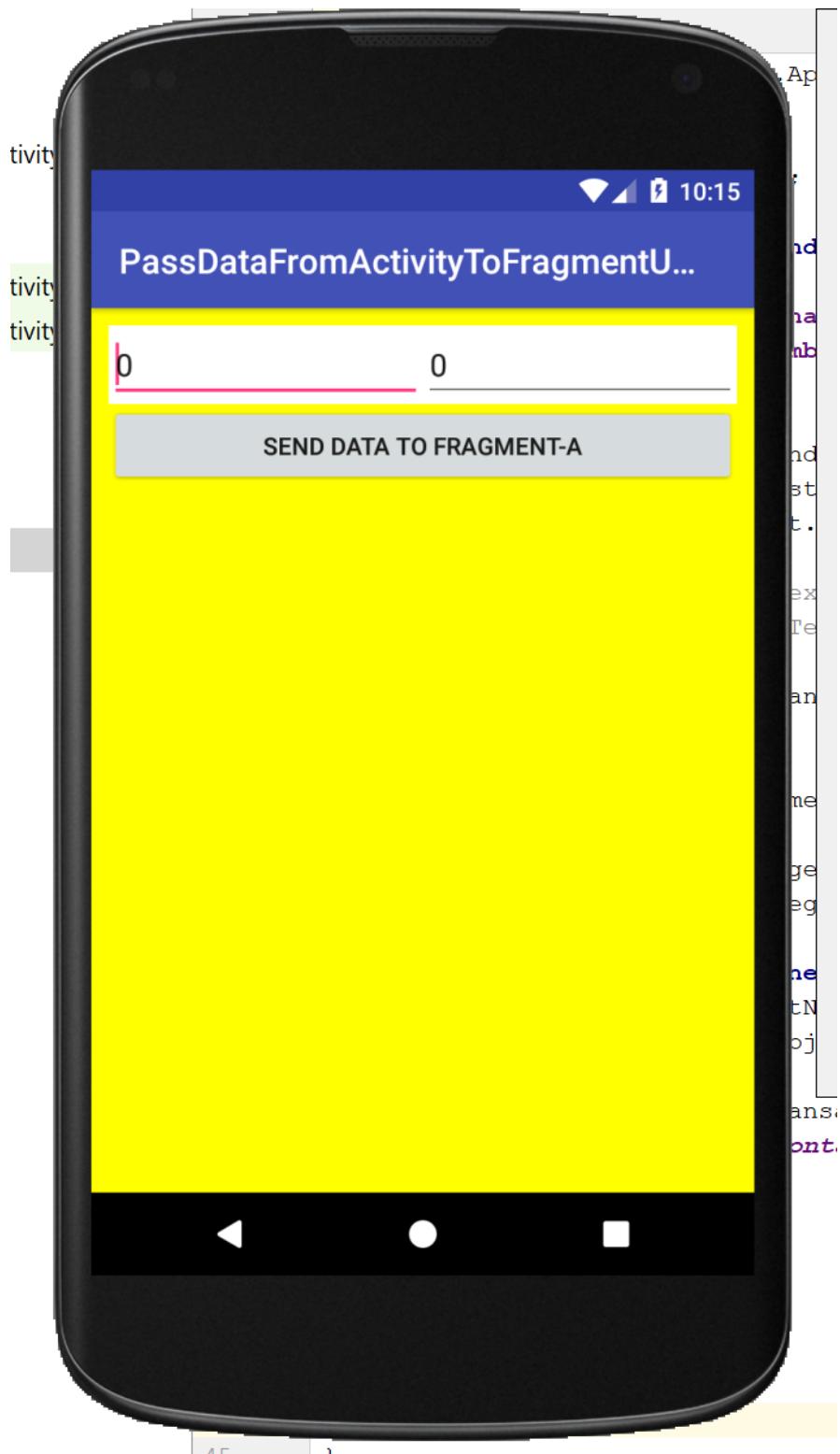
private void addTwoNumbers(int firstNumber, int secondNumber) {
    int result = firstNumber + secondNumber;
    txvResult.setText("Result : " + result + "\n" + "Name: " + employee.Name + "\n" +
        "Number: " + employee.employeeNumber);
}

public void setData(int firstNumber, int secondNumber) {
    this.firstNumber = firstNumber;
    this.secondNumber = secondNumber;
}

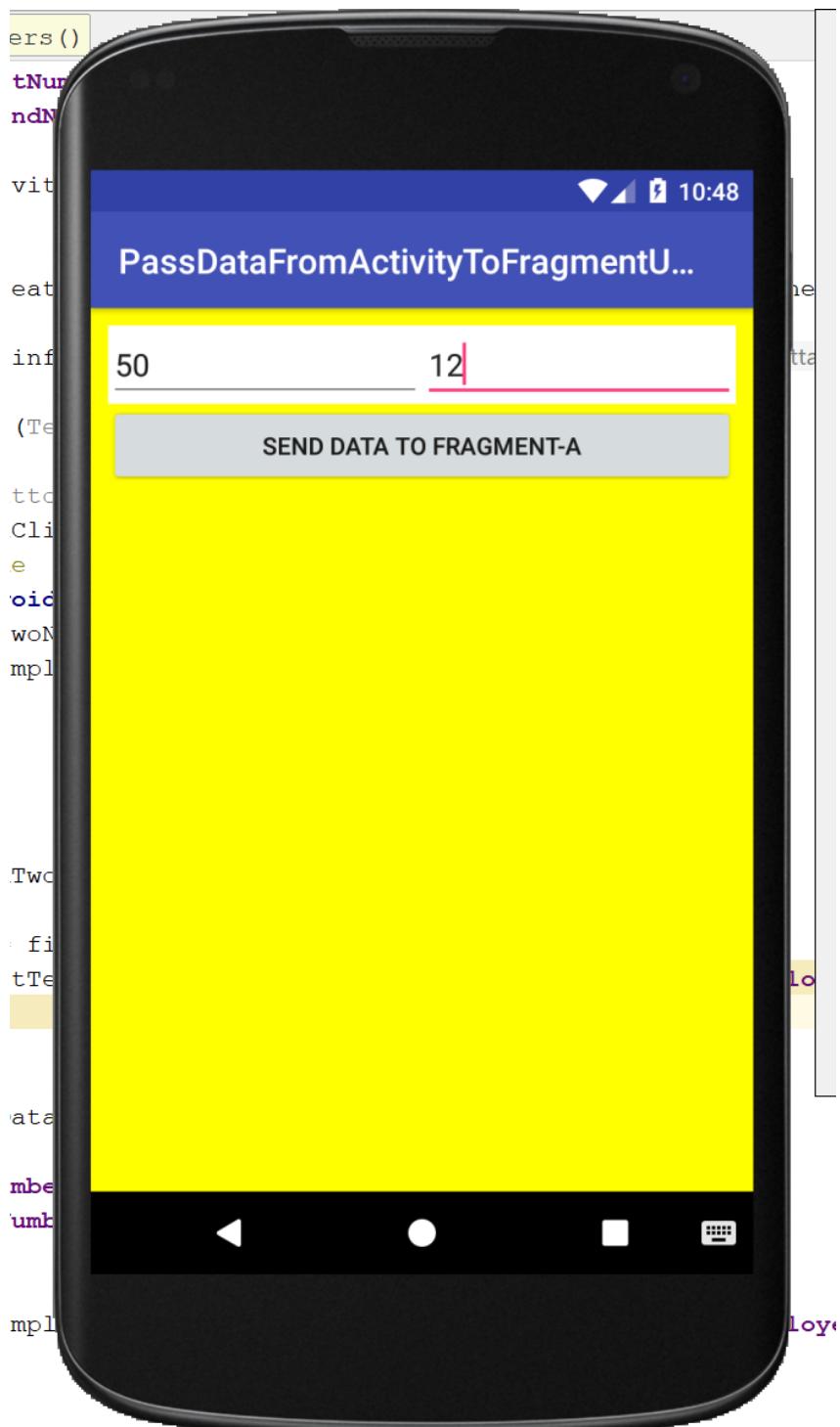
public void setEmployee(MainActivity.Employee employee) { this.employee = employee; }
}
```

The code editor has syntax highlighting and a yellow selection bar highlighting the line `"Number: " + employee.employeeNumber);`. The bottom status bar shows 'Gradle build finished in 3s 262ms (3 minutes ago)'.

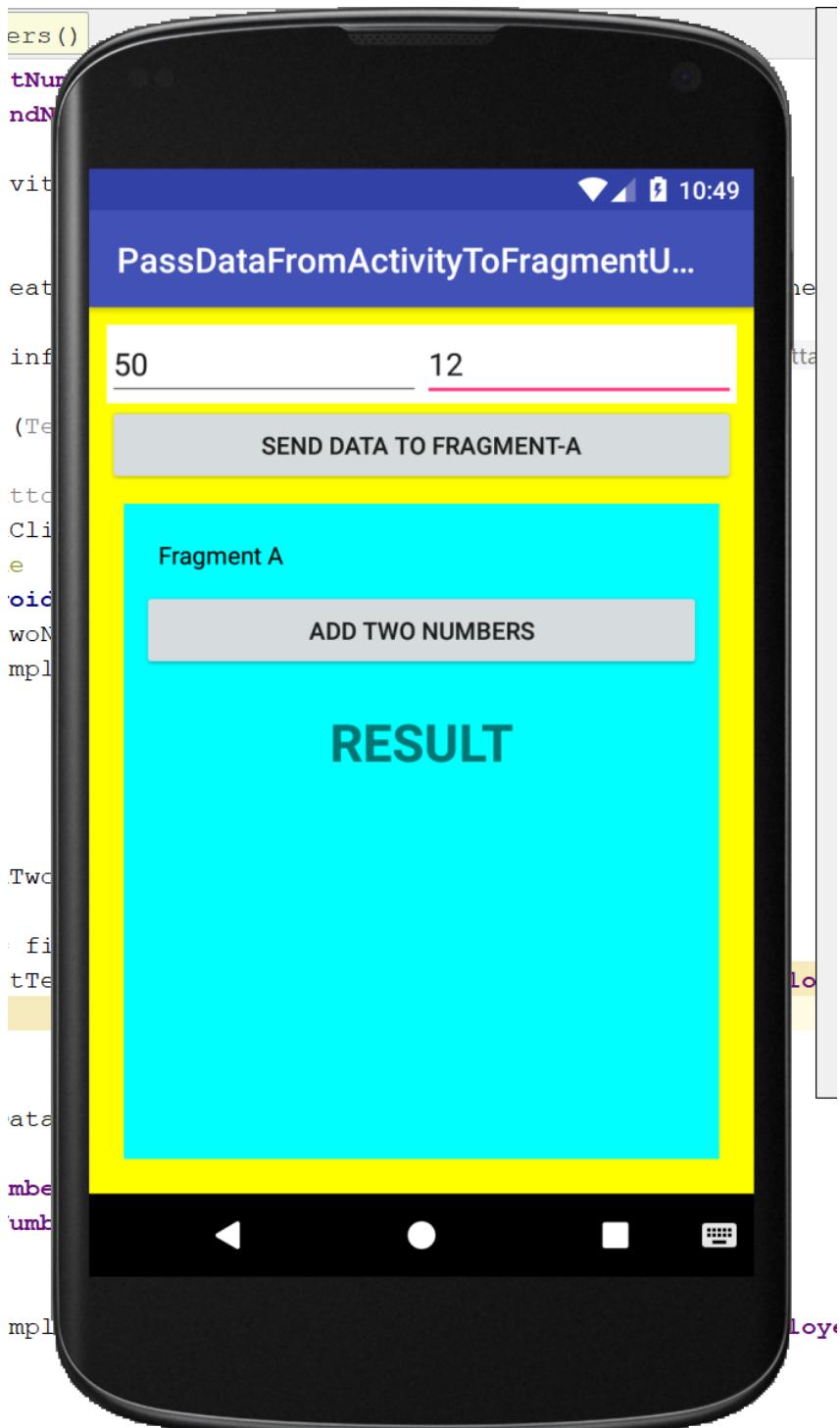
Now you run the app:



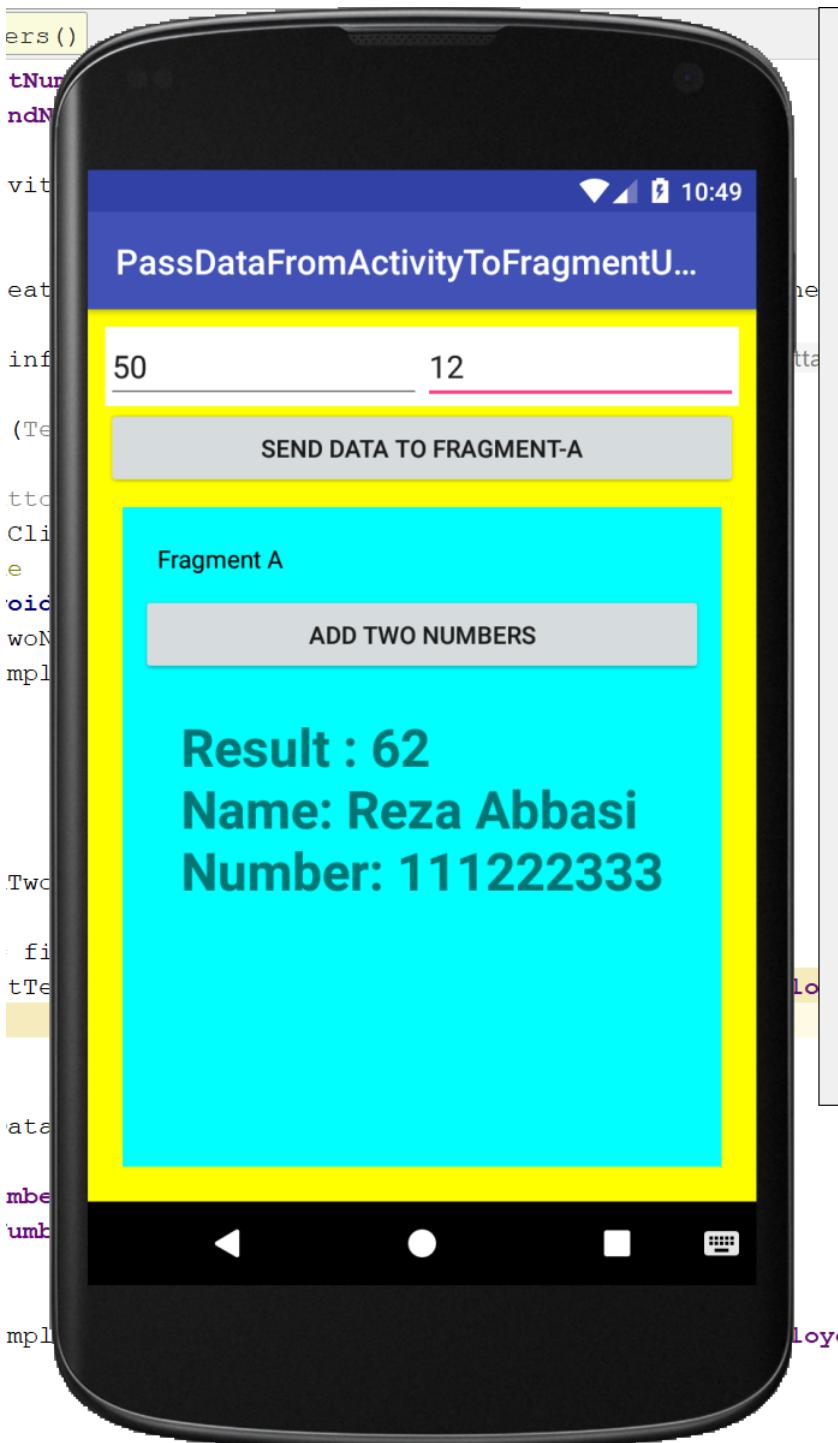
Type two numbers:



Click “Send Data to Fragment A” button:



Click “Add two numbers” button:



So again we were able to send data from the host activity to the fragment and in this example we also sent the non-primitive data as well.