Program 9. Demonstrate ImageView and GridView

Mainactivity.java

```java
package com.example.imagegridview;

import android.content.Intent;
import android.os.Bundle;
//import android.support.v7.app.AppCompatActivity;
import android.view.View;
import android.widget.AdapterView;
import android.widget.GridView;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {
    GridView simpleGrid;
    int logos[] = {R.drawable.logo1, R.drawable.logo2, R.drawable.logo3,
R.drawable.logo4,
            R.drawable.logo5, R.drawable.logo6, R.drawable.logo7,
R.drawable.logo8, R.drawable.logo9,
            R.drawable.logo10, R.drawable.logo11, R.drawable.logo12,
R.drawable.logo13};
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        simpleGrid = (GridView) findViewById(R.id.simpleGridView); // init
GridView
        // Create an object of CustomAdapter and set Adapter to GirdView
        CustomAdapter customAdapter = new
CustomAdapter(getApplicationContext(), logos);
        simpleGrid.setAdapter(customAdapter);
        // implement setOnItemClickListener event on GridView
        simpleGrid.setOnItemClickListener(new
AdapterView.OnItemClickListener() {
            @Override
            public void onItemClick(AdapterView<?> parent, View view, int
position, long id) {
                // set an Intent to Another Activity
                Intent intent = new Intent(MainActivity.this,
SecondActivity.class);
                intent.putExtra("image", logos[position]); // put image
data in Intent
                startActivity(intent); // start Intent
            }
        });
    }
}
```

activity_main.xml

```xml
<?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:orientation="vertical">
    <!--
    GridView with 3 value for numColumns attribute
    -->
    <GridView
        android:id="@+id/simpleGridView"
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:footerDividersEnabled="false"
        android:padding="1dp"
        android:numColumns="3" />
</LinearLayout>
```

activity_gridview.xml

```xml
<?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="wrap_content"
    android:padding="1dp"
    android:orientation="vertical">
    <ImageView
        android:id="@+id/icon"
        android:layout_width="match_parent"
        android:layout_height="120dp"
        android:scaleType="fitXY"
        android:layout_gravity="center_horizontal"
        android:src="@drawable/logo1" />
</LinearLayout>
```

ImageAdapter.java

```java
package com.example.imagegridview;

import android.content.Context;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.BaseAdapter;
import android.widget.ImageView;
public class ImageAdapter extends BaseAdapter {
    Context context;
    int logos[];
```

```java
    LayoutInflater inflter;
    public ImageAdapter(Context applicationContext, int[] logos) {
        this.context = applicationContext;
        this.logos = logos;
        inflter = (LayoutInflater.from(applicationContext));
    }
    @Override
    public int getCount() {
        return logos.length;
    }
    @Override
    public Object getItem(int i) {
        return null;
    }
    @Override
    public long getItemId(int i) {
        return 0;
    }
    @Override
    public View getView(int i, View view, ViewGroup viewGroup) {
        view = inflter.inflate(R.layout.activity_gridview, null); //
inflate the layout
        ImageView icon = (ImageView) view.findViewById(R.id.icon); // get
the reference of ImageView
        icon.setImageResource(logos[i]); // set logo images
        return view;
    }
}
```

SecondActivity.java

```java
package com.example.imagegridview;

import android.content.Intent;
import android.os.Bundle;
//import android.support.v7.app.AppCompatActivity;
import android.widget.ImageView;

import androidx.appcompat.app.AppCompatActivity;

public class SecondActivity extends AppCompatActivity {
    ImageView selectedImage;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_second);
        selectedImage = (ImageView) findViewById(R.id.selectedImage); //
init a ImageView
        Intent intent = getIntent(); // get Intent which we set from
Previous Activity
        selectedImage.setImageResource(intent.getIntExtra("image", 0)); //
get image from Intent and set it in ImageView
    }
}
```

activity_second.xml

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

<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"

    android:background="#fff"
    tools:context="com.example.imagegridview.SecondActivity">
    <ImageView
        android:id="@+id/selectedImage"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_centerInParent="true"
        android:scaleType="fitXY" />
</RelativeLayout>
```