Program 9. Demonstrate ImageView and GridView

Activitymain.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<GridView xmlns:android="http://schemas.android.com/apk/res/android"
    android:id="@+id/gridview"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    android:columnWidth="120dp"
    android:numColumns="3"
    android:verticalSpacing="10dp"
    android:horizontalSpacing="10dp"
    android:stretchMode="columnWidth"
    android:gravity="center" />
```

Mainactivity.java

```java
package com.example.gridview;
import android.app.Activity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.GridView;

public class MainActivity extends Activity {
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
```

```java
setContentView(R.layout.activity_main);


GridView gridview = (GridView) findViewById(R.id.gridview);

gridview.setAdapter(new

ImageAdapter(this));


gridview.setOnItemClickListener(new

AdapterView.OnItemClickListener() {

    public void onItemClick(AdapterView<?>

                    parent, View v, int

                    position, long id) {

// Send intent to SingleViewActivity

        Intent i = new Intent(getApplicationContext(), SingleViewActivity.class);

// Pass image index

        i.putExtra("id", position);

        startActivity(i);


    }

});

}

}
```

Activity_single_view.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" >


    <ImageView android:id="@+id/SingleView"
```

```xml
        android:layout_width="fill_parent"

        android:layout_height="fill_parent"/>


</LinearLayout>
```

SingleViewActivity.java

```java
package com.example.gridview;

import android.app.Activity;

import android.content.Intent;

import android.os.Bundle;

import android.widget.ImageView;


public class SingleViewActivity extends Activity {

    @Override

    public void onCreate(Bundle

                    savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.single_view);


// Get intent data

        Intent i = getIntent();


// Selected image id

        int position = i.getExtras().getInt("id");

        ImageAdapter imageAdapter = new

            ImageAdapter(this);



        ImageView imageView = (ImageView)
```

```java
            findViewById(R.id.SingleView);


        imageView.setImageResource(imageAdapter.picIds[position]);
    }
}
```

ImageAdaptor.java

```java
package com.example.gridview;


import android.content.Context;
import android.view.View;
import android.view.ViewGroup;
import android.widget.BaseAdapter;
import android.widget.GridView;
import android.widget.ImageView;


class ImageAdapter extends BaseAdapter {
    private Context mContext;
    // Constructor
    public ImageAdapter(Context c) {
        mContext = c;
    }


    public int getCount() {
        return picIds.length;
    }


    public Object getItem(int position) {
        return null;
    }
```

```java
public long getItemId(int position) {



    return 0;
}


// create a new ImageView for each itemreferenced by the Adapter
public View getView(int position, View
        convertView, ViewGroup parent) {
    ImageView imageView;


    if (convertView == null) {
        imageView = new ImageView(mContext);
        imageView.setLayoutParams(new
            GridView.LayoutParams(85, 85));


        imageView.setScaleType(ImageView.ScaleType.CENTER_CROP);
        imageView.setPadding(8, 8, 8, 8);
    }
    else
    {
        imageView = (ImageView) convertView;
    }


    imageView.setImageResource(picIds[position]);
    return imageView;



}
```

```java
    // Keep all Images in array

    public Integer[] picIds = {

            R.drawable.sample2,

            R.drawable.sample3,

            R.drawable.sample4,

            R.drawable.sample5,

            R.drawable.sample6,

            R.drawable.sample7,

            R.drawable.sample0,

            R.drawable.sample1,

            R.drawable.sample2,

            R.drawable.sample3,

            R.drawable.sample4,

            R.drawable.sample5,

            R.drawable.sample6,

            R.drawable.sample7,

            R.drawable.sample0,

            R.drawable.sample1,

            R.drawable.sample2,

            R.drawable.sample3,

            R.drawable.sample4,

            R.drawable.sample5,

            R.drawable.sample6,

            R.drawable.sample7,



            R.drawable.sample0, R.drawable.sample1

    };

}
```