

Program 8. Create an android application to demonstrate GridView.

ACTIVITY_MAIN.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

```
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.app.Activity;
import android.view.Menu;
import android.widget.GridView;

public class MainActivity extends Activity {
    @Override
    protected void onCreate(Bundle
savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
}
```

```
GridView gridview = (GridView)
findViewById(R.id.gridview);
gridview.setAdapter(new
ImageAdapter(this));
}
}
```

ImageAdaptor.java

```
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;
}

public long getItemId(int position) {
```

```
return 0;
```

```
}
```

```
// create a new ImageView for each item
```

```
referenced 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;
```

```
}
```

```
// 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

};

}

Output

