

## Practical No.10

**Aim: Write an Android Program to Demonstrate Grid View**

**Source Code:**

### **activity\_main.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:padding="16dp"
    tools:context=".MainActivity">

    <GridView
        android:id="@+id/gv"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:numColumns="4"/>

</RelativeLayout>
```

### **MainActivity.java**

```
package com.example.practical_no_10;

import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.AdapterView.OnItemClickListener;
import android.widget.ArrayAdapter;
import android.widget.GridView;
import android.widget.Toast;

import java.lang.reflect.Array;
import java.util.Arrays;

public class MainActivity extends AppCompatActivity {

    GridView gridView;
    String[] numbersArray;
    ArrayAdapter<String> adapter;

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

        gridView=findViewById(R.id.gv);
        numbersArray=new String[]{

"One","Two","Three","Four","Five","Six","Seven","Eight","Nine","Ten","Eleven","Twelve",
"Thirteen" };
```

```

adapter=new ArrayAdapter<>(this,android.R.layout.simple_list_item_1,numbersArray);
gridViews.setAdapter(adapter);
gridViews.setOnItemClickListener(
    new AdapterView.OnItemClickListener() {
        @Override
        public void onItemClick(AdapterView<?> parent, View view, int position, long id) {
            String clickedItemValue= Arrays.asList(numbersArray).get(position);
            Toast.makeText(MainActivity.this, "Position : "+position+" Value :
 "+clickedItemValue, Toast.LENGTH_SHORT).show();
        }
    }
);
}
}

```

**Output:**

