package com.tutlane.helloworld;  
import android.support.v7.app.AppCompatActivity;  
import android.os.Bundle;  
import android.util.Log;  
  
public class MainActivity extends AppCompatActivity {  
  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity\_main);  
        Log.d("Activity Lifecycle","onCreate invoked");  
    }  
    @Override  
    protected void onStart() {  
        super.onStart();  
        Log.d("Activity Lifecycle","onStart invoked");  
    }  
    @Override  
    protected void onResume() {  
        super.onResume();  
        Log.d("Activity Lifecycle","onResume invoked");  
    }  
    @Override  
    protected void onPause() {  
        super.onPause();  
        Log.d("Activity Lifecycle","onPause invoked");  
    }  
    @Override  
    protected void onStop() {  
        super.onStop();  
        Log.d("Activity Lifecycle","onStop invoked");  
    }  
    @Override  
    protected void onRestart() {  
        super.onRestart();  
        Log.d("Activity Lifecycle","onRestart invoked");  
    }  
    @Override  
    protected void onDestroy() {  
        super.onDestroy();  
        Log.d("Activity Lifecycle","onDestroy invoked");  
    }  
}

//Includes all lifecycle callbacks methods

<?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:layout\_width="match\_parent"  
    android:layout\_height="match\_parent"  
    android:orientation="vertical">  
    <ListView  
        android:id="@+id/userlist"  
        android:layout\_width="match\_parent"  
        android:layout\_height="wrap\_content" >  
    </ListView>  
</LinearLayout>

//XML FILE FOR LIST VIEW

package com.tutlane.listview;  
import android.support.v7.app.AppCompatActivity;  
import android.os.Bundle;  
import android.widget.ArrayAdapter;  
import android.widget.ListView;  
  
public class MainActivity extends AppCompatActivity {  
    private ListView mListView;  
    private ArrayAdapter aAdapter;  
    private String[] users = { "Suresh Dasari", "Rohini Alavala", "Trishika Dasari", "Praveen Alavala", "Madav Sai", "Hamsika Yemineni"};  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity\_main);  
        mListView = (ListView) findViewById(R.id.userlist);  
        aAdapter = new ArrayAdapter(this, android.R.layout.simple\_list\_item\_1, users);  
        mListView.setAdapter(aAdapter);  
    }  
}

//Java code for list view

<?xml version="1.0" encoding="utf-8"?>  
<GridView xmlns:android="http://schemas.android.com/apk/res/android"  
    android:id="@+id/gridview"  
    android:layout\_width="match\_parent"  
    android:layout\_height="match\_parent"  
    android:columnWidth="110dp"  
    android:numColumns="auto\_fit"  
    android:verticalSpacing="10dp"  
    android:horizontalSpacing="10dp"  
    android:stretchMode="columnWidth"  
    android:gravity="center" />

//XML file for grid view

package com.tutlane.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;  
/\*\*  
 \* Created by tutlane on 24-08-2017.  
 \*/  
public class ImageAdapter extends BaseAdapter {  
    private Context mContext;  
    public ImageAdapter(Context c) {  
        mContext = c;  
    }  
    public int getCount() {  
        return thumbImages.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 = new ImageView(mContext);  
            imageView.setLayoutParams(new GridView.LayoutParams(200, 200));  
            imageView.setScaleType(ImageView.ScaleType.CENTER\_CROP);  
            imageView.setPadding(8, 8, 8, 8);  
            imageView.setImageResource(thumbImages[position]);  
            return imageView;  
    }  
    // Add all our images to arraylist  
    public Integer[] thumbImages = {  
            R.drawable.img1, R.drawable.img2,  
            R.drawable.img3, R.drawable.img4,  
            R.drawable.img5, R.drawable.img6,  
            R.drawable.img7, R.drawable.img8,  
            R.drawable.img1, R.drawable.img2,  
            R.drawable.img3, R.drawable.img4,  
            R.drawable.img5, R.drawable.img6,  
            R.drawable.img7, R.drawable.img8,  
            R.drawable.img1, R.drawable.img2,  
            R.drawable.img3, R.drawable.img4,  
            R.drawable.img5  
    };  
}

//image adapter.java in grid view

package com.tutlane.gridview  
import android.support.v7.app.AppCompatActivity;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.AdapterView;  
import android.widget.GridView;  
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity\_main);  
        GridView gv = (GridView) findViewById(R.id.gvDetails);  
        gv.setAdapter(new ImageAdapter(this));  
        gv.setOnItemClickListener(new AdapterView.OnItemClickListener() {  
            public void onItemClick(AdapterView<?> parent, View v, int position, long id) {  
                Toast.makeText(MainActivity.this, "Image Position: " + position, Toast.LENGTH\_SHORT).show();  
            }  
        });  
    }  
}

//main\_activity.java

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
    android:orientation="vertical" android:layout\_width="match\_parent"  
    android:layout\_height="match\_parent">  
    <CheckBox  
        android:id="@+id/chkJava"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:padding="10dp"  
        android:layout\_marginTop="150dp"  
        android:layout\_marginLeft="100dp"  
        android:text="Java"  
        android:onClick="onCheckboxClicked"/>  
    <CheckBox  
        android:id="@+id/chkPython"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:padding="10dp"  
        android:layout\_marginLeft="100dp"  
        android:text="Python"  
        android:onClick="onCheckboxClicked"/>  
    <CheckBox  
        android:id="@+id/chkAndroid"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:padding="10dp"  
        android:layout\_marginLeft="100dp"  
        android:text="Android"  
        android:onClick="onCheckboxClicked"/>  
    <CheckBox  
        android:id="@+id/chkAngular"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:padding="10dp"  
        android:layout\_marginLeft="100dp"  
        android:text="AngularJS"  
        android:onClick="onCheckboxClicked"/>  
    <Button  
        android:id="@+id/getBtn"  
        android:layout\_width="wrap\_content"  
        android:layout\_height="wrap\_content"  
        android:layout\_marginLeft="100dp"  
        android:text="Get Details" />  
</LinearLayout>

//checkbox XML file

package com.tutlane.checkboxexample;  
import android.support.v7.app.AppCompatActivity;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.CheckBox;  
import android.widget.Toast;  
  
public class MainActivity extends AppCompatActivity {  
    CheckBox android, java, angular, python;  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity\_main);  
        android = (CheckBox)findViewById(R.id.chkAndroid);  
        angular = (CheckBox)findViewById(R.id.chkAngular);  
        java = (CheckBox)findViewById(R.id.chkJava);  
        python = (CheckBox)findViewById(R.id.chkPython);  
        Button btn = (Button)findViewById(R.id.getBtn);  
        btn.setOnClickListener(new View.OnClickListener() {  
            @Override  
            public void onClick(View v) {  
                String result = "Selected Courses";  
                if(android.isChecked()){  
                result += "\nAndroid";  
                }  
                if(angular.isChecked()){  
                    result += "\nAngularJS";  
                }  
                if(java.isChecked()){  
                    result += "\nJava";  
                }  
                if(python.isChecked()){  
                    result += "\nPython";  
                }  
                Toast.makeText(getApplicationContext(), result, Toast.LENGTH\_SHORT).show();  
            }  
        });  
    }  
    public void onCheckboxClicked(View view) {  
        boolean checked = ((CheckBox) view).isChecked();  
        String str="";  
        // Check which checkbox was clicked  
        switch(view.getId()) {  
            case R.id.chkAndroid:  
                str = checked?"Android Selected":"Android Deselected";  
                break;  
            case R.id.chkAngular:  
                str = checked?"AngularJS Selected":"AngularJS Deselected";  
                break;  
            case R.id.chkJava:  
                str = checked?"Java Selected":"Java Deselected";  
                break;  
            case R.id.chkPython:  
                str = checked?"Python Selected":"Python Deselected";  
                break;  
        }  
        Toast.makeText(getApplicationContext(), str, Toast.LENGTH\_SHORT).show();  
    }  
}

//mainactivity.java file for checkbox

LinearLayout layout = (LinearLayout)findViewById(R.id.l\_layout);  
CheckBox cb = new CheckBox(this);  
cb.setText("Tutlane");  
cb.setChecked(true);  
layout.addView(cb);

//checkbox control in activity file

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
    android:orientation="vertical" android:layout\_width="match\_parent"  
    android:layout\_height="match\_parent">  
    <CheckBox  
    android:id="@+id/chk1"  
    android:layout\_width="wrap\_content"  
    android:layout\_height="wrap\_content"  
    android:checked="true"  
    android:text="Java"

    android:onClick="onCheckBoxClick"/>  
</LinearLayout>

//define checkbox click event in XML layout file

public void onCheckboxClicked(View view) {  
    // Is the view now checked?  
    boolean checked = ((CheckBox) view).isChecked();  
    // Check which checkbox was clicked  
    switch(view.getId()) {  
        case R.id.chk1:  
            if (checked)  
            // Do your coding  
        else  
            // Do your coding

            break;  
        // Perform your logic  
    }  
}

//define checkbox click event in XML layout file

public void onCheckboxClicked(View view) {  
    // Is the view now checked?  
    boolean checked = ((CheckBox) view).isChecked();  
    // Check which checkbox was clicked  
    switch(view.getId()) {  
        case R.id.chk1:  
            if (checked)  
            // Do your coding  
        else  
            // Do your coding

            break;  
        // Perform your logic  
    }  
}

//define checkbox click event in activity file