**PRACTICAL: -8**

**Q. Create an application that will retrieve a JSON file. parse it and they display it into listview**

**Activity\_main.xml**

*<?***xml version="1.0" encoding="utf-8"***?>*<**LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity"  
 android:orientation="vertical"**>  
  
 <**ListView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/list"** />  
  
</**LinearLayout**>

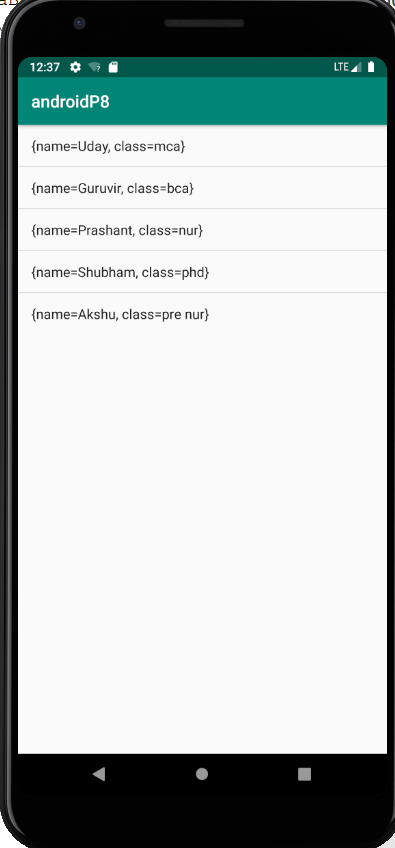
**Mainactivity.java**

**package** com.example.androidP8;  
**import** androidx.appcompat.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.util.Log;  
**import** android.widget.ArrayAdapter;  
**import** android.widget.ListView;  
**import** org.json.JSONArray;  
**import** org.json.JSONException;  
**import** org.json.JSONObject;  
**import** java.io.IOException;  
**import** java.io.InputStream;  
**import** java.util.ArrayList;  
**import** java.util.HashMap;  
  
**public class** MainActivity **extends** AppCompatActivity {  
 ListView **list**;  
 ArrayList<HashMap<String, String>> **formList**;  
  
 **public** String loadJSONFromAsset() {  
 String json = **null**;  
 **try** {  
 InputStream is = getApplicationContext().getAssets().open(**"new.json"**);  
 **int** size = is.available();  
 **byte**[] buffer = **new byte**[size];  
 is.read(buffer);  
 is.close();  
 json = **new** String(buffer, **"UTF-8"**);  
 } **catch** (IOException ex) {  
 ex.printStackTrace();  
 **return null**;  
 }  
 **return** json;  
 }  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 **list**=findViewById(R.id.***list***);  
  
 **try** {  
 JSONObject obj = **new** JSONObject(loadJSONFromAsset());  
 JSONArray m\_jArry = obj.getJSONArray(**"chandigarh"**);  
 **formList** = **new** ArrayList<HashMap<String, String>>();  
 HashMap<String, String> m\_li;  
  
 **for** (**int** i = 0; i < m\_jArry.length(); i++) {  
 JSONObject jo\_inside = m\_jArry.getJSONObject(i);  
 Log.*d*(**"Details-->"**, jo\_inside.getString(**"name"**));  
 String formula\_value = jo\_inside.getString(**"name"**);  
 String url\_value = jo\_inside.getString(**"class"**);  
  
 *//Add your values in your `ArrayList` as below:* m\_li = **new** HashMap<String, String>();  
 m\_li.put(**"name"**, formula\_value);  
 m\_li.put(**"class"**, url\_value);  
  
 **formList**.add(m\_li);  
 }  
 } **catch** (JSONException e) {  
 e.printStackTrace();  
 }  
  
 ArrayAdapter arrayAdapter=**new** ArrayAdapter(getApplicationContext(),android.R.layout.***simple\_list\_item\_1***,**formList**);  
 **list**.setAdapter(arrayAdapter);  
 }  
}

**asset>new.json**

{  
 **"chandigarh"**: [  
 {  
 **"name"**: **"Uday"**,  
 **"class"**: **"mca"** },  
 {  
 **"name"**: **"Guruvir"**,  
 **"class"**: **"bca"** }, {  
 **"name"**: **"Prashant"**,  
 **"class"**: **"nur"** },  
 {  
 **"name"**: **"Shubham"**,  
 **"class"**: **"phd"** },  
 {  
 **"name"**: **"Akshu"**,  
 **"class"**: **"pre nur"** }  
 ]  
}

**Output**



GitHub: - http://github.com/uic.18mca8091/practical8