

PRACTICAL: -8

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

Git:- <https://github.com/18mca8095/practical8>

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_jArray = obj.getJSONArray("chandigarh");
        formList = new ArrayList<HashMap<String, String>>();
        HashMap<String, String> m_li;

        for (int i = 0; i < m_jArray.length(); i++) {
            JSONObject jo_inside = m_jArray.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": "Prashant",
      "class": "mca"
    },
    {
      "name": "Guruvir",
      "class": "bca"
    }, {
      "name": "Ederes",
      "class": "nur"
    },
    {
      "name": "Uday",
      "class": "phd"
    },
    {
      "name": "Shubu",
      "class": "pre nur"
    }
  ]
}
```

Output

