

Practical-8.

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

Xml file

```
<?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/list1"
        />

</LinearLayout>
```

```
package com.example.Exp8;
```

```
import androidx.appcompat.app.AppCompatActivity;
```

```
import android.content.Context;
import
    android.content.res.AssetManager;
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 list1;
    ArrayList<HashMap<String, String>> formList;
    public String
loadJSONFromAsset() {
    String json = null;
    try {
    InputStream is =
    getApplicationContext().getAssets().open("prabhat.js
n");    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.list1);

    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");

//we need to 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,for
mList);      list.setAdapter(arrayAdapter);
}
}

```

asset>data.json

```

{
  "chandigarh": [
    {
      "name": "Aakshi",
      "class": "mca"
    },
    {
      "name": "rajeev",
      "class": "bca"
    }, {
      "name": "guddia",
      "class": "nur"
    },
    {
      "name": "max",
      "class": "phd"
    },
    {
      "name": "gagan",
      "class": "pre nur"
    }
  ]
}

```

Output

