

## Practical No.: 20

### Aim: Retrieve JSON Object using Volley Library

App → Gradle Scripts → **build.gradle** (Module.app)

```
dependencies {  
    implementation fileTree(dir: 'libs', include: ['*.jar'])  
    implementation 'androidx.appcompat:appcompat:1.1.0'  
    implementation 'androidx.constraintlayout:constraintlayout:1.1.3'  
    testImplementation 'junit:junit:4.12'  
    androidTestImplementation 'androidx.test.ext:junit:1.1.1'  
    androidTestImplementation 'androidx.test.espresso:espresso-core:3.2.0'  
    implementation 'com.android.volley:volley:1.1.1'  
}
```

*after adding click on Sync Now*

#### AndroidManifest.xml

```
<uses-permission android:name="android.permission.INTERNET"></uses-permission>
```

#### 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"  
    tools:context=".MainActivity">  
  
    <TextView  
        android:id="@+id/text_result"  
        android:layout_width="wrap_content"  
        android:layout_height="wrap_content"  
        android:textSize="15sp"/>  
  
    <Button  
        android:id="@+id/button"  
        android:layout_width="wrap_content"  
        android:layout_height="wrap_content"  
        android:layout_alignParentEnd="true"  
        android:layout_alignParentRight="true"  
        android:layout_alignParentBottom="true"  
        android:layout_marginEnd="163dp"  
        android:layout_marginRight="175dp"  
        android:layout_marginBottom="202dp"  
        android:background="#414af4"
```

```
        android:text="@string/parse"
        android:textColor="#ffffff" />
```

```
</RelativeLayout>
```

### **MainActivity.java**

```
package com.example.practical_no_20;

import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
import com.android.volley.Request;
import com.android.volley.RequestQueue;
import com.android.volley.Response;
import com.android.volley.VolleyError;
import com.android.volley.toolbox.JsonObjectRequest;
import com.android.volley.toolbox.Volley;

import org.json.JSONArray;
import org.json.JSONException;
import org.json.JSONObject;

public class MainActivity extends AppCompatActivity {

    private TextView mTextViewResult;
    private RequestQueue mQueue;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        mTextViewResult=findViewById(R.id.text_result);
        Button buttonParse=findViewById(R.id.button);
        mQueue= Volley.newRequestQueue(this);

        buttonParse.setOnClickListener(
            new View.OnClickListener() {
                @Override
                public void onClick(View v) {
                    jsonParse();
                }
            }
        );
    }
}
```

```

private void jsonParse()
{
    String url="http://api.myjson.com/bins/kp9wz";
    JsonObjectRequest request=new JsonObjectRequest(Request.Method.GET, url, null, new
Response.Listener<JSONObject>() {
    @Override
    public void onResponse(JSONObject response) {
        try {
            JSONArray jsonArray = response.getJSONArray("employees");
            for (int i = 0; i < jsonArray.length(); i++) {
                JSONObject employee = jsonArray.getJSONObject(i);
                String firstName = employee.getString("firstname");
                int age = employee.getInt("age");
                String mail = employee.getString("mail");
                mTextViewResult.append(firstName + "-->" + String.valueOf(age) + "-->" +
mail+"\n");
            }
        } catch (JSONException e) {
            e.printStackTrace();
        }

    }
}, new Response.ErrorListener() {
    @Override
    public void onErrorResponse(VolleyError error) {
        error.printStackTrace();
    }
});
mQueue.add(request);
}
}

```

**Output:**

