**public class** MainActivity **extends** AppCompatActivity {  
  
 Button **b**;  
 ListView **lv**;  
 ArrayList<HashMap<String, String>> **contactList**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
  
 **contactList** = **new** ArrayList<>();  
 **lv**= (ListView) findViewById(R.id.***list***);  
 **b**= (Button) findViewById(R.id.***fetch***);  
 **b**.setOnClickListener(**new** View.OnClickListener(){  
 @Override  
 **public void** onClick(View v) {  
 String strUrl = **"https://api.androidhive.info/contacts/"**;  
 **new** UrlHandler().execute(strUrl);  
 }  
 });  
 }  
  
 **public class** UrlHandler **extends** AsyncTask<String, Integer, String> {  
 @Override  
 **protected void** onPostExecute(String s) {  
 **super**.onPostExecute(s);  
 ListAdapter adapter = **new** SimpleAdapter(MainActivity.**this**, **contactList**,  
 R.layout.***list\_item***, **new** String[]{ **"id"**,**"name"**,**"email"**},  
 **new int**[]{R.id.***cid***,R.id.***cname***, R.id.***cemail***});  
 **lv**.setAdapter(adapter);  
 }  
  
 @Override  
 **protected** String doInBackground(String... params) {  
  
 String json\_response = **null**;  
 **try** {  
 URL url = **new** URL(params[0]);  
 HttpURLConnection connection = (HttpURLConnection) url.openConnection();  
 connection.setRequestMethod(**"GET"**);  
 connection.connect();  
 InputStream in = **new** BufferedInputStream(connection.getInputStream());  
 json\_response = convertStreamToString(in);  
  
 **if** (json\_response != **null**) {  
 **try** {  
 JSONObject jsonObj = **new** JSONObject(json\_response);  
  
 *// Getting JSON Array node* JSONArray contacts = jsonObj.getJSONArray(**"contacts"**);  
  
 *// looping through All Contacts* **for** (**int** i = 0; i < contacts.length(); i++) {  
 JSONObject c = contacts.getJSONObject(i);  
 String id = c.getString(**"id"**);  
 String name = c.getString(**"name"**);  
 String email = c.getString(**"email"**);  
  
 *// tmp hash map for single contact* HashMap<String, String> contact = **new** HashMap<>();  
  
 *// adding each child node to HashMap key => value* contact.put(**"id"**, id);  
 contact.put(**"name"**, name);  
 contact.put(**"email"**, email);  
  
 *// adding contact to contact list* **contactList**.add(contact);  
 }  
 } **catch** (JSONException e) {  
 Log.*e*(**"error"**, **"Json parsing error: "** + e.getMessage());  
 }  
 } **else** {  
 Log.*e*(**"error"**, **"Couldn't get json from server."**);  
 }  
 } **catch** (MalformedURLException e) {  
 e.printStackTrace();  
 } **catch** (IOException e) {  
 e.printStackTrace();  
 }  
 **return null**;  
 }  
 **private** String convertStreamToString(InputStream is) {  
 BufferedReader reader = **new** BufferedReader(**new** InputStreamReader(is));  
 StringBuilder sb = **new** StringBuilder();  
  
 String line;  
 **try** {  
 **while** ((line = reader.readLine()) != **null**) {  
 sb.append(line).append(**'\n'**);  
 }  
 } **catch** (IOException e) {  
 e.printStackTrace();  
 }  
 **return** sb.toString();  
 }  
 }  
  
  
}

**list\_item.xml**

<**LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:orientation="vertical" android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"**>  
 <**TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/cid"** />  
 <**TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/cname"** />  
 <**TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/cemail"** />  
</**LinearLayout**>

**activity\_main.xml**

<**LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 tools:context="com.example.apple.app7.MainActivity"**>  
  
 <**Button  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Fetch Data"  
 android:id="@+id/fetch"** />  
  
 <**TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/textView"** />  
 <**ListView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/list"** ></**ListView**>  
</**LinearLayout**>