

```

import com.google.gson.JsonObject;

import com.google.gson.JsonParser;

import okhttp3.OkHttpClient;

import okhttp3.Request;

import okhttp3.Response;


import java.io.IOException;


Public class WeatherApp {

    Private static final String API_KEY = "your_openweathermap_api_key"; // Replace with
your API key

    Private static final String BASE_URL =
https://api.openweathermap.org/data/2.5/weather;


    Public static void main(String[] args) {

        String city = "London"; // You can change this to any city

        Try {

            String jsonResponse = fetchWeatherData(city);

            If (jsonResponse != null) {

                displayWeatherData(jsonResponse);

            } else {

                System.out.println("Failed to fetch weather data.");

            }

        } catch (IOException e) {

            System.err.println("Error occurred: " + e.getMessage());

        }

    }


    Private static String fetchWeatherData(String city) throws IOException {

```

```
OkHttpClient client = new OkHttpClient();
```

```
String url = BASE_URL + "?q=" + city + "&appid=" + API_KEY + "&units=metric";
```

```
Request request = new Request.Builder()
```

```
    .url(url)
```

```
    .build();
```

```
Try (Response response = client.newCall(request).execute()) {
```

```
    If (response.isSuccessful() && response.body() != null) {
```

```
        Return response.body().string();
```

```
    } else {
```

```
        System.out.println("API request failed with code: " + response.code());
```

```
        Return null;
```

```
    }
```

```
}
```

```
}
```

```
Private static void displayWeatherData(String jsonResponse) {
```

```
    JsonObject jsonObject = JsonParser.parseString(jsonResponse).getAsJsonObject();
```

```
    String cityName = jsonObject.get("name").getString();
```

```
    JsonObject main = jsonObject.getAsJsonObject("main");
```

```
    Double temperature = main.get("temp").getAsDouble();
```

```
    Int humidity = main.get("humidity").getAsInt();
```

```
    JsonObject weather =
```

```
    jsonObject.getAsJsonArray("weather").get(0).getAsJsonObject();
```

```
    String description = weather.get("description").getString();
```

```
System.out.println("Weather Information:");  
System.out.println("City: " + cityName);  
System.out.println("Temperature: " + temperature + "°C");  
System.out.println("Humidity: " + humidity + "%");  
System.out.println("Description: " + description);  
}  
}
```