Homework 04:

```
 /*
       Given
           https://reqres.in/api/users/2
       When
           User send GET Request to the URL
       Then
           HTTP Status Code should be 200
       And
           Response format should be "application/json"
       And
           "email" is "janet.weaver@reqres.in",
       And
           "first_name" is "Janet"
       And
           "last_name" is "Weaver"
       And
           "text" is "To keep ReqRes free, contributions towards server costs are
appreciated!"
    */
```

For "Homework 04," which involves validating several response parameters from a specific API endpoint, you can either utilize an interactive tool like Postman or script a test using JavaScript with Node.js and the Axios library. Each approach allows for a detailed examination of the response to ensure it adheres to the defined conditions regarding HTTP status, content type, and specific field values within the JSON payload.

Using Postman for Interactive API Testing

1. **Open Postman**:
    - Launch the Postman application on your computer.
2. **Set Up the GET Request**:
    - Choose the method GET.
    - Enter the URL: **https://reqres.in/api/users/2**.
3. **Implement Tests**:
    - Go to the "Tests" tab in the request setup area.
    - Add the following JavaScript code to evaluate the response against your specified criteria:

```
// Verify HTTP status code pm.test("HTTP Status Code is 200", function () {
pm.response.to.have.status(200); }); // Confirm the content type of the response pm.test("Response
format is application/json", function () { pm.response.to.have.header("Content-Type", "application/json;
charset=utf-8"); }); // Check specific response body attributes pm.test("Email is correct", function () {
pm.expect(pm.response.json().data.email).to.eql("janet.weaver@reqres.in"); }); pm.test("First name is
correct", function () { pm.expect(pm.response.json().data.first_name).to.eql("Janet"); }); pm.test("Last
name is correct", function () { pm.expect(pm.response.json().data.last_name).to.eql("Weaver"); });
pm.test("Text is correct", function () { pm.expect(pm.response.json().support.text).to.eql("To keep
ReqRes free, contributions towards server costs are appreciated!"); });
```

4. **Execute and Review**:

    - Send the request and observe the results in the "Test Results" tab to confirm that all conditions are met as specified.

Employing JavaScript and Axios for Programmatic API Testing

1. **Setup Your Testing Environment**:

    - Ensure Node.js is installed on your system.
    - Create a directory, initialize a Node.js project, and install Axios:

```
mkdir my-api-test cd my-api-test npm init -y npm install axios
```

2. **Write the Test Script**:

    - Create a **test.js** file.
    - Insert the following JavaScript code to send a GET request and validate the response:

```
const axios = require('axios'); axios.get('https://reqres.in/api/users/2') .then(response => {
console.log("HTTP Status Code check:", response.status === 200); // Should be true
console.log("Content-Type check:", response.headers['content-type'].includes("application/json;
charset=utf-8")); // Should be true console.log("Email check:", response.data.data.email ===
"janet.weaver@reqres.in"); // Should be true console.log("First name check:",
response.data.data.first_name === "Janet"); // Should be true console.log("Last name check:",
response.data.data.last_name === "Weaver"); // Should be true console.log("Text check:",
response.data.support.text === "To keep ReqRes free, contributions towards server costs are
appreciated!"); // Should be true }) .catch(error => { console.error('Error during API call', error); });
```

3. **Run the Script**:
    - Execute the script with:

```
node test.js
```

This approach allows you to verify each aspect of the response programmatically, ideal for integrating into automated test suites or continuous integration systems.

Both methodologies—Postman for manual, interactive testing and JavaScript for automated tests—offer thorough means to ensure that the API's response is as expected per the conditions outlined in your homework assignment.