API 1: Create new user

```java
package Benzi.RestAssured;


    public class PojoData
    {
        /*
         * POJO Plain Old Java Object
         * Encapsulation= private data +public method
         */

        private String name;
        private String job;
        private String id;

        public String getName() {
            return name;
        }
        public void setName(String name) {
            this.name = name;
        }
        public String getJob() {
            return job;
        }
        public void setJob(String job) {
            this.job = job;
        }


    }
```

package Benzi.RestAssured;

import io.restassured.RestAssured;

import io.restassured.http.ContentType;

```java
import io.restassured.response.Response;

import org.testng.Assert;

import org.testng.annotations.Test;


import java.util.HashMap;

import java.util.Map;

import org.testng.annotations.Test;

import static io.restassured.RestAssured.*;

import static io.restassured.matcher.RestAssuredMatchers.*;

import static org.hamcrest.Matchers.*;

//Assignment 1

public class NewUser

{


        String id;


  @Test(priority=1)


        public void PostWithMap()

        {

                //Request PayLoad

                HashMap<String,Object> data=new HashMap<String,Object>();

                data.put("name","string");

                data.put("job","string");



                given()

                        .contentType("application/json")

                        .body(data)


                .when()
```

```java
        .post("https://reqres.in/api/users")



        .then()

        .statusCode(201)

        .body("name",equalTo("string"))

        .log().body();


        System.out.println("New user created using HashMap!");



    }




@Test

public void pojoWay() {

        //Request payload

        PojoData data=new PojoData();

        data.setName("string");

        data.setJob("string");


        given()

                .contentType("application/json")

                .body(data)


        .when()

        .post("https://reqres.in/api/users")


        .then()

        .statusCode(201)
```

```
.body("name",equalTo("string"))//json validation

.log().body();


//validation for java object

System.out.println(data.getName().equals("string"));

System.out.println(data.getJob().equals("string"));

        }

    }
```

Output

```
{
    "name": "string",
    "job": "string",
    "id": "158",
    "createdAt": "2024-06-03T14:19:42.997Z"
}
true
true
{
    "name": "string",
    "job": "string",
    "id": "346",
    "createdAt": "2024-06-03T14:19:44.439Z"
}
New user created using HashMap!
PASSED: pojoWay
PASSED: PostWithMap
```

API 2 : Delete user

```java
package Benzi.RestAssured;

import static io.restassured.RestAssured.given;
import static org.hamcrest.Matchers.equalTo;

import org.testng.annotations.Test;

public class deleteUser {
  @Test
  public void deleteUser()
  {
      given()
      .when()
          .delete("https://reqres.in/api/users/2")


      .then()
      .statusCode(204)
      .log().all();
  }
}
```

OUTPUT

```
[RemoteTestNG] detected TestNG version 7.4.0
HTTP/1.1 204 No Content
Date: Mon, 03 Jun 2024 14:23:22 GMT
Content-Length: 0
Connection: keep-alive
Report-To: {"group":"heroku-
nel","max_age":3600,"endpoints":[{"url":"https://nel.
heroku.com/reports?ts=1717424602&sid=c4c9725f-1ab0-
44d8-820f-
430df2718e11&s=somfOoiNSwXIM3IMyiaVnulBJ8j0i2k8i9Op2q
NlqQw%3D"}]}
Reporting-Endpoints: heroku-
nel=https://nel.heroku.com/reports?ts=1717424602&sid=
c4c9725f-1ab0-44d8-820f-
430df2718e11&s=somfOoiNSwXIM3IMyiaVnulBJ8j0i2k8i9Op2q
NlqQw%3D
Nel: {"report_to":"heroku-
nel","max_age":3600,"success_fraction":0.005,"failure
_fraction":0.05,"response_headers":["Via"]}
X-Powered-By: Express
Access-Control-Allow-Origin: *
Etag: W/"2-vyGp6PvFo4RvsFtPoIWeCReyIC8"
Via: 1.1 vegur
CF-Cache-Status: DYNAMIC
Server: cloudflare
CF-RAY: 88e057350e0e8007-MAA
PASSED: deleteUser
```

API 3 : Retrieve User List with pagination

```
package Benzi.RestAssured;
import static org.hamcrest.Matchers.*;
import org.testng.annotations.Test;
import java.util.HashMap;
import static io.restassured.RestAssured.*;
```

```java
import static
io.restassured.matcher.RestAssuredMatchers.*;


public class Query_PathParams {
        @Test

        public void parametersTest()
        {

            //https:      //reqres.in/   api      /users
?page=2
            // protocol: domain     /   resource /path
params ? query params

            given()
        //  .pathParam("apipath","users")
         // .queryParam("page",6)

            .when()
            .get("https://reqres.in/api/users?page=1")

            .then()
            .statusCode(200)
            .log().all();




        }
    }
```

OUTPUT

[RemoteTestNG] detected TestNG version 7.4.0
HTTP/1.1 200 OK
Date: Mon, 03 Jun 2024 14:25:32 GMT
Content-Type: application/json; charset=utf-8
Transfer-Encoding: chunked
Connection: keep-alive
Report-To: {"group":"heroku-
nel","max_age":3600,"endpoints":[{"url":"https://nel.
heroku.com/reports?ts=1717417888&sid=c4c9725f-1ab0-
44d8-820f-
430df2718e11&s=VttpPf5acaUqlfKotTxbGMKS51wHIMuOz6nGg%
2FyBjPg%3D"}]}
Reporting-Endpoints: heroku-
nel=https://nel.heroku.com/reports?ts=1717417888&sid=
c4c9725f-1ab0-44d8-820f-
430df2718e11&s=VttpPf5acaUqlfKotTxbGMKS51wHIMuOz6nGg%
2FyBjPg%3D
Nel: {"report_to":"heroku-
nel","max_age":3600,"success_fraction":0.005,"failure
_fraction":0.05,"response_headers":["Via"]}
X-Powered-By: Express
Access-Control-Allow-Origin: *
Etag: W/"3e4-2RLXvr5wTg9YQ6aH95CkYoFNuO8"
Via: 1.1 vegur
Cache-Control: max-age=14400
CF-Cache-Status: HIT
Age: 6844
Vary: Accept-Encoding
Server: cloudflare
CF-RAY: 88e05a612ac17f5d-MAA
Content-Encoding: gzip

{
    "page": 1,
    "per_page": 6,
    "total": 12,
    "total_pages": 2,
    "data": [
        {
            "id": 1,
            "email": "george.bluth@reqres.in",
            "first_name": "George",

```json
            "last_name": "Bluth",
            "avatar": "https://reqres.in/img/faces/1-
image.jpg"
        },
        {
            "id": 2,
            "email": "janet.weaver@reqres.in",
            "first_name": "Janet",
            "last_name": "Weaver",
            "avatar": "https://reqres.in/img/faces/2-
image.jpg"
        },
        {
            "id": 3,
            "email": "emma.wong@reqres.in",
            "first_name": "Emma",
            "last_name": "Wong",
            "avatar": "https://reqres.in/img/faces/3-
image.jpg"
        },
        {
            "id": 4,
            "email": "eve.holt@reqres.in",
            "first_name": "Eve",
            "last_name": "Holt",
            "avatar": "https://reqres.in/img/faces/4-
image.jpg"
        },
        {
            "id": 5,
            "email": "charles.morris@reqres.in",
            "first_name": "Charles",
            "last_name": "Morris",
            "avatar": "https://reqres.in/img/faces/5-
image.jpg"
        },
        {
            "id": 6,
            "email": "tracey.ramos@reqres.in",
            "first_name": "Tracey",
            "last_name": "Ramos",
            "avatar": "https://reqres.in/img/faces/6-
image.jpg"
        }
```

```
    ],
    "support": {
        "url": "https://reqres.in/#support-heading",
        "text": "To keep ReqRes free, contributions
towards server costs are appreciated!"
    }
}
PASSED: parametersTest
```

API 4: Write a test script to verify the authentication process of an API using OAuth 2.0

package Benzi.RestAssured;

import org.testng.annotations.Test;

import static io.restassured.RestAssured.*;

import static io.restassured.matcher.RestAssuredMatchers.*;

import static org.hamcrest.Matchers.*;

import java.util.HashMap;

public class Authentication_Oauth

{

  @Test

  public void oAuth2Test()

  {

        given()

        .auth().oauth2("12345")

```java
        .when()

        .get("https://postman-echo.com/")


        .then()

        .statusCode(200)

        .log().body();

        System.out.println("OAuth2.0 Authentication is validated!");




    }
}
```

OUTPUT

```
OAuth2.0 Authentication is validated!
PASSED: oAuth2Test


===============================================
    Default test
    Tests run: 1, Failures: 0, Skips: 0
```