

Repo link: [https://github.com/hindujar/Phse3\\_end-\\_project.git](https://github.com/hindujar/Phse3_end-_project.git)

## PHASE\_END\_PROJECT

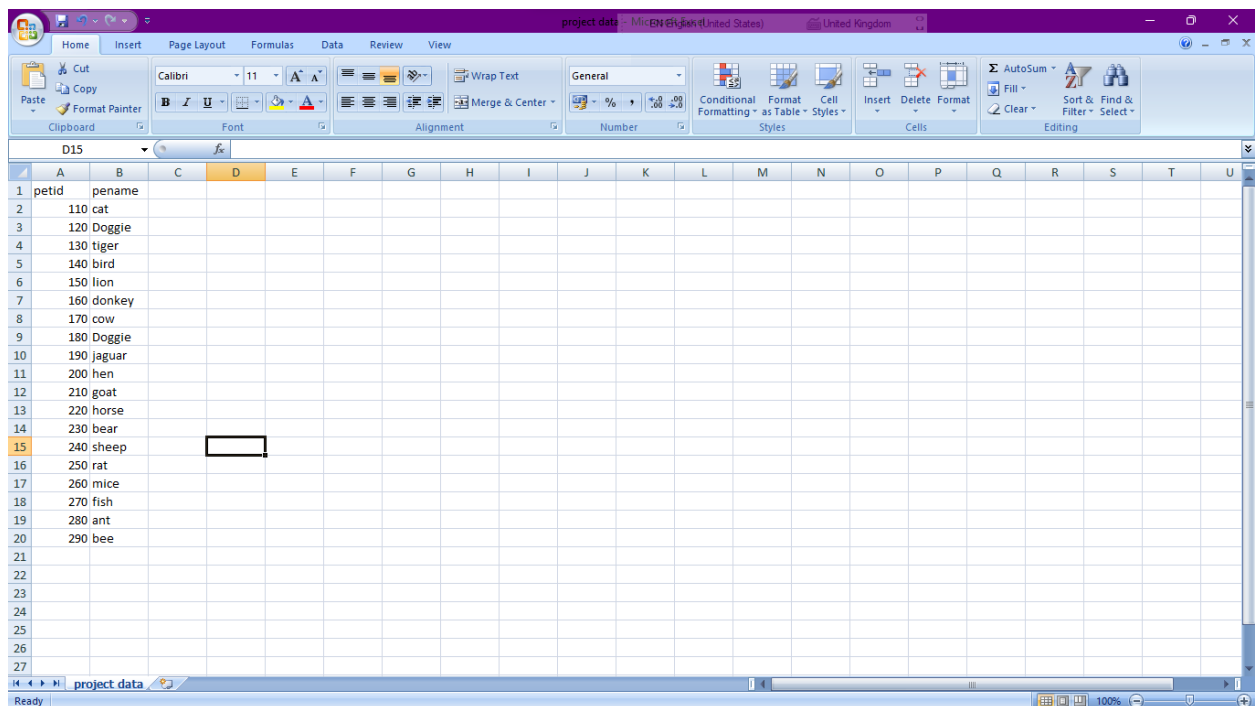
### Aim:

- 1.To automate functionalities using <https://petstore.swagger.io/> REST API services in post man
- 2.To automate using rest assured
- 3.To automate the given url using Jmeter

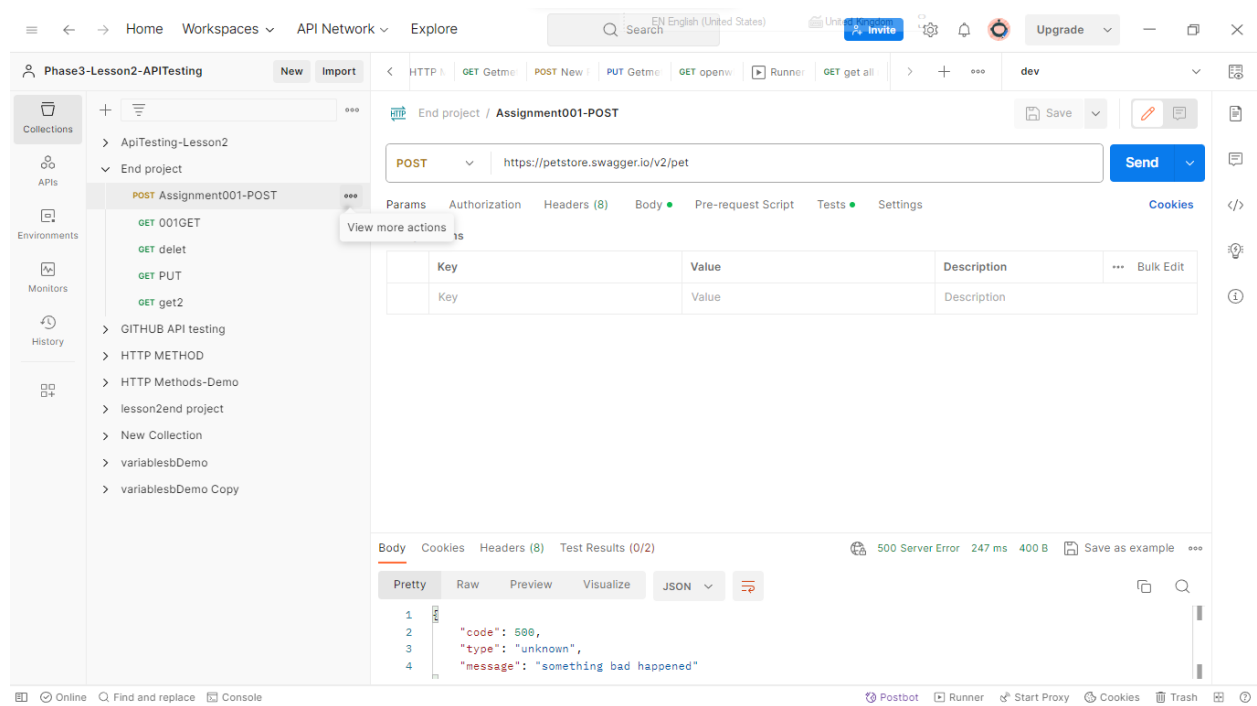
### 1.Postman Assignment001:

#### Reques1:

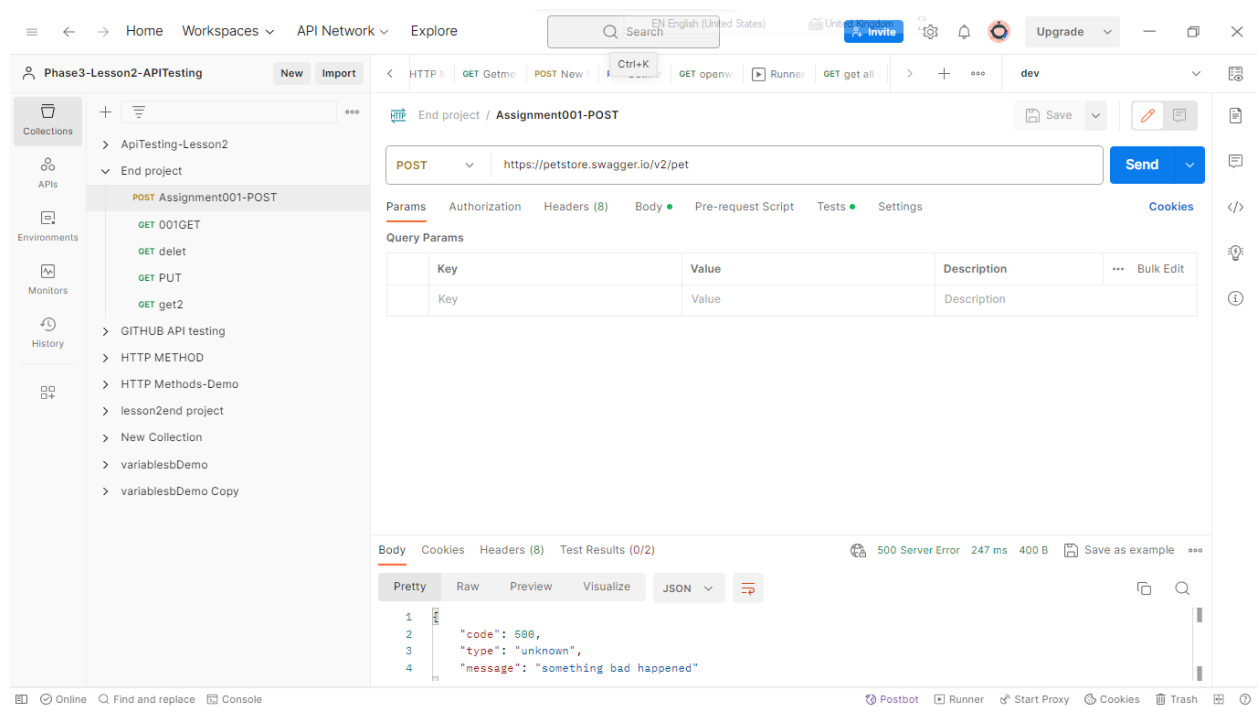
[A].create a data in xcel sheet in csv file



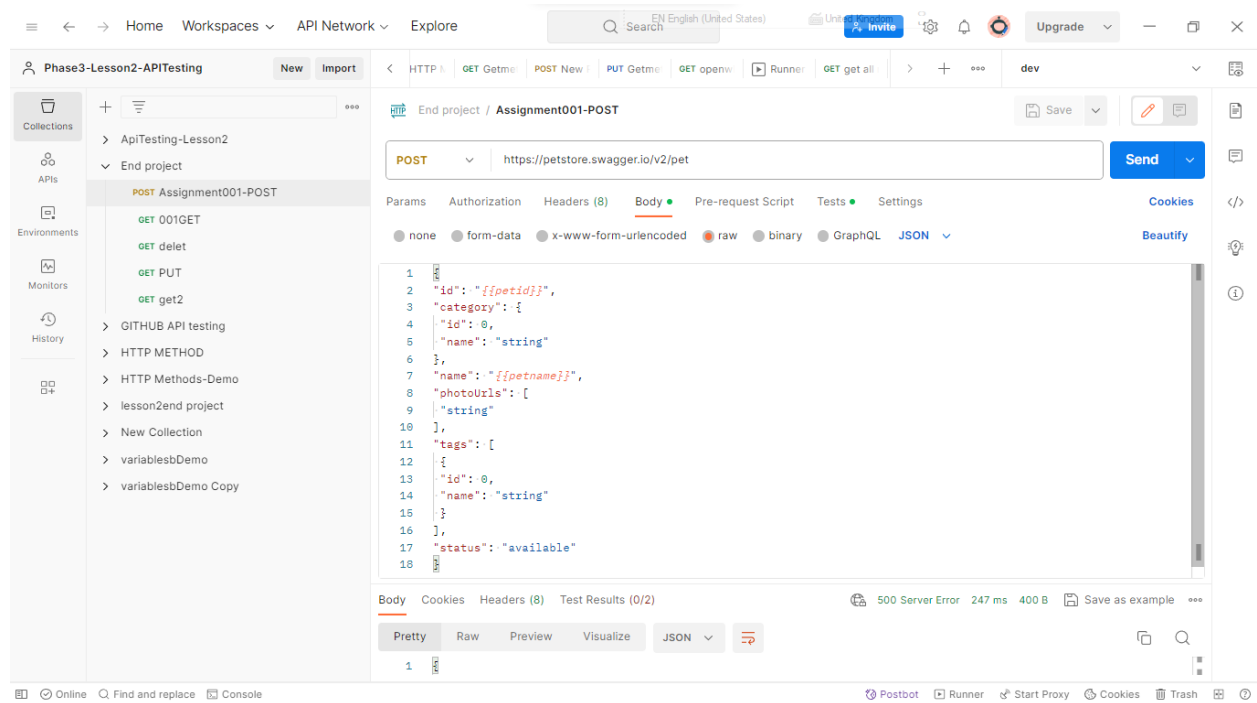
[B].Create a collection in postman and add post request:



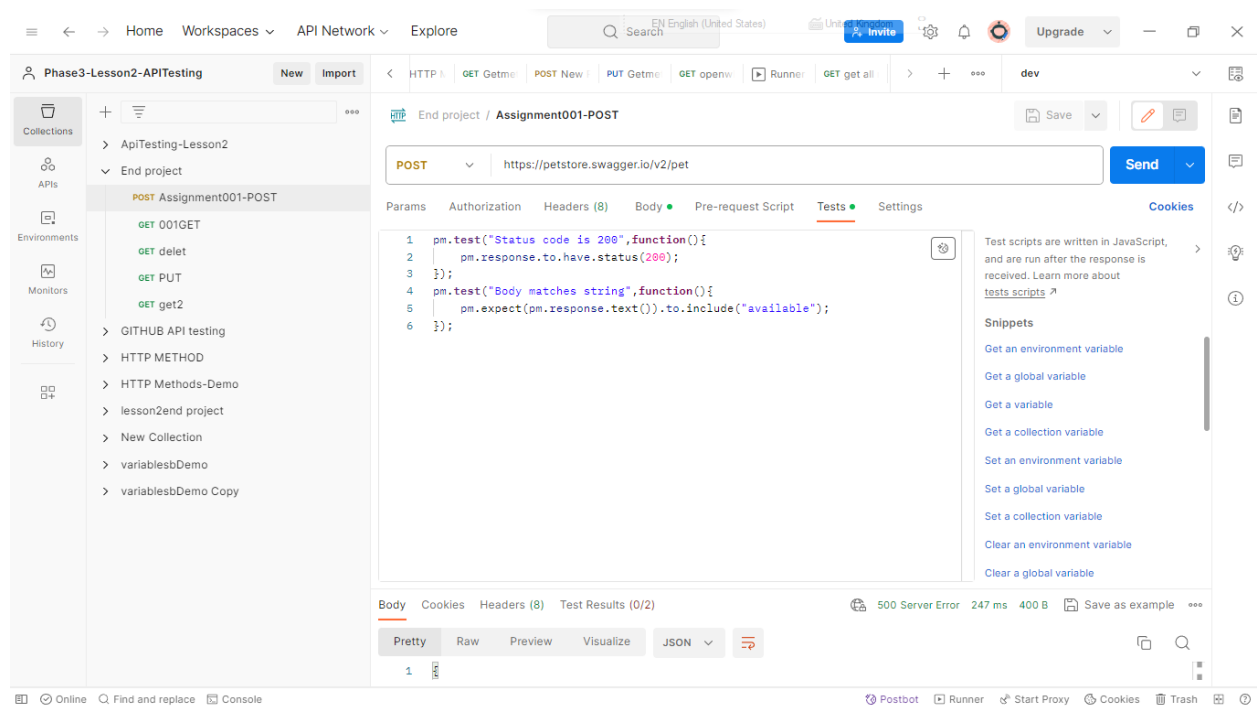
[C]Add a URL in the bar:



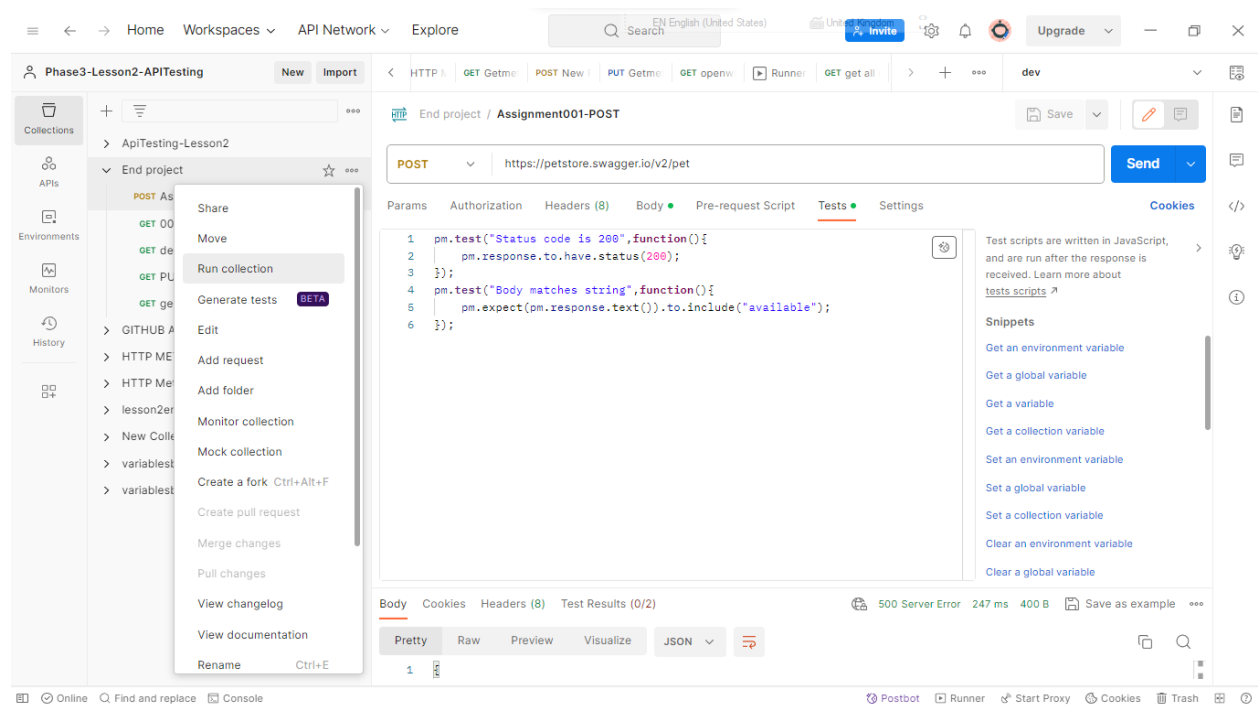
[D]Add the code in the body:



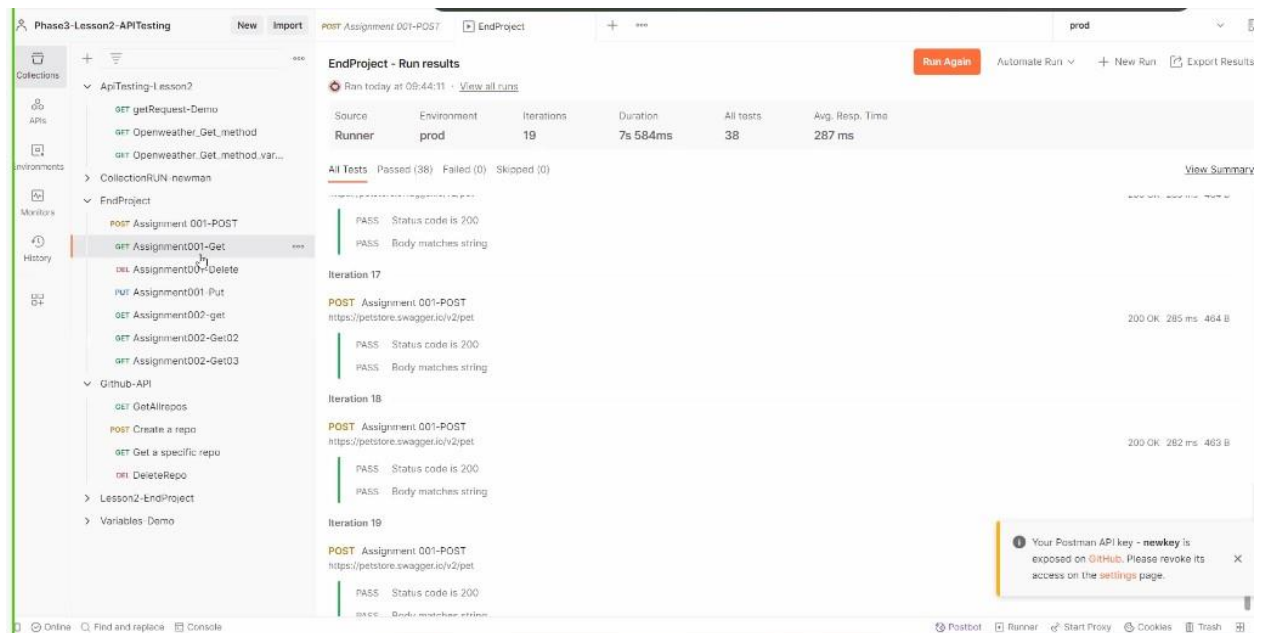
[E]Add the code in the test bar:



**Run the collection :**



output:



## REQUEST 2

Add get request:

Add the url and variables

Phase3-Lesson2-APITesting

Runner GET get all GET 001 POST Assign End pr End pr End pr dev

End project / 001GET

GET https://petstore.swagger.io/v2/pet/{petId} Send

Params Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

```
1 pm.test("Status code is 200", function() {
2   pm.response.to.have.status(200);
3 });
4 pm.test("Your test name", function() {
5   var jsonData = pm.response.json();
6   pm.expect(jsonData.id).to.eql(110);
7 });
8
```

Response

Test scripts are written in JavaScript, and are run after the response is received. Learn more about [test scripts](#).

Snippets

- Get an environment variable
- Get a global variable
- Get a variable
- Get a collection variable
- Set an environment variable
- Set a global variable
- Set a collection variable
- Clear an environment variable
- Clear a global variable

Phase3-Lesson2-APITesting

GET Assignment001-Get dev

EndProject / Assignment001-Get

GET https://petstore.swagger.io/v2/pet/{petId} Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

```
1 pm.test("Status code is 200", function () {
2   pm.response.to.have.status(200);
3 });
4
5 pm.test("Your test name", function () {
6   var jsonData = pm.response.json();
7   pm.expect(jsonData.id).to.eql(110);
8 });
9
10
```

Body Cookies Headers (8) Test Results (2/2)

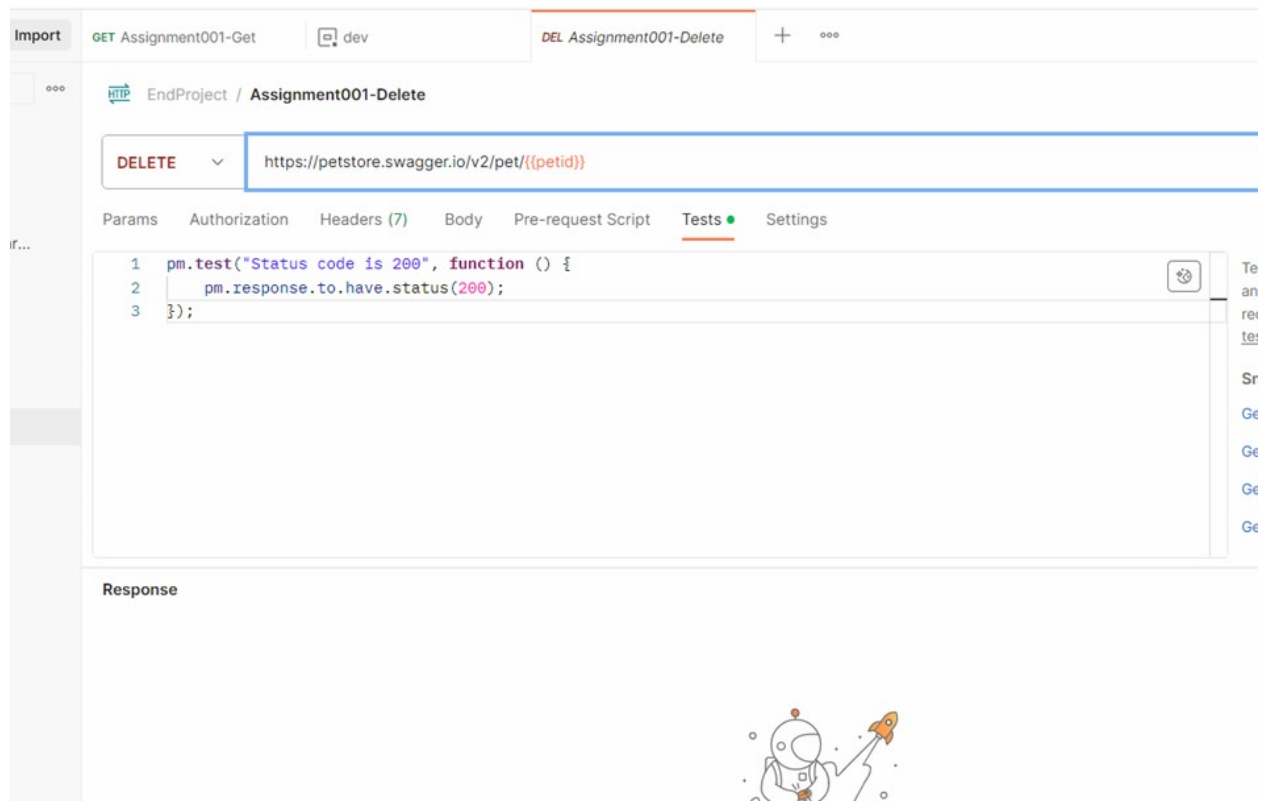
Status: 200 OK Time: 274 ms Size: 465 B Save as example

Pretty Raw Preview Visualize JSON

```
1 {
2   "id": 110,
3   "category": {
4     "id": 0,
5     "name": "string"
6   },
7   "name": "Sadie",
8   "photoUrls": [
9     "string"
10  ],

```

Delete the pet id

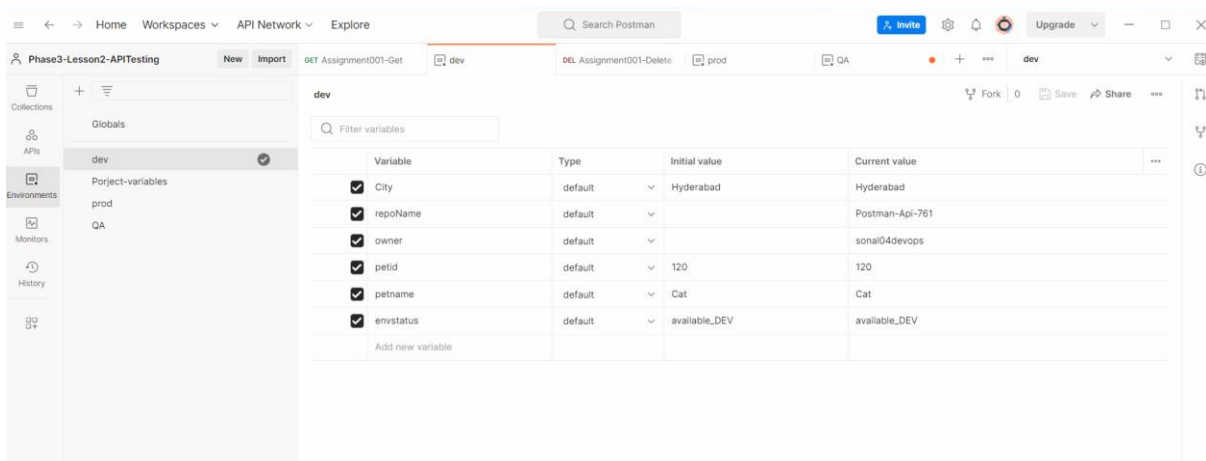


## 2.Postman Assignment002

Create an three enviromental variables

- Dev
- Prod
- QA

1.dev variable



## 2.QA variable

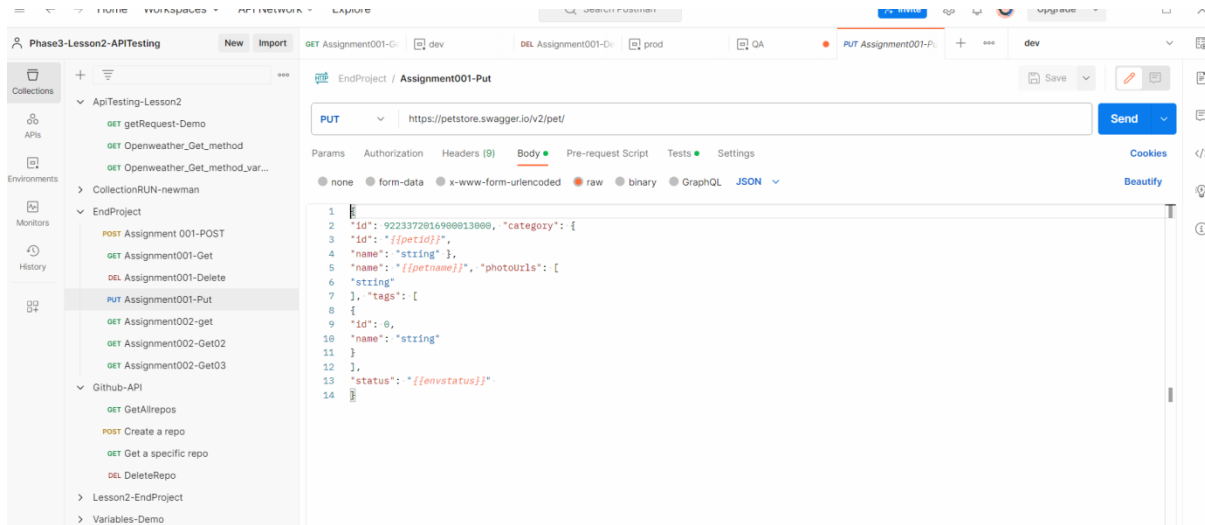
The screenshot shows the Postman interface with the 'QA' environment selected. The left sidebar contains a tree view with 'Environments' expanded, showing 'dev', 'prod', and 'QA'. The main panel displays the 'QA' environment configuration with a table of variables.

Variable	Type	Initial value	Current value
<input checked="" type="checkbox"/> City	default		New delhi
<input checked="" type="checkbox"/> envstatus	default	available_QA	available_QA
<input checked="" type="checkbox"/> petid	default	120	120
<input checked="" type="checkbox"/> petname	default	Cat	Cat
<a href="#">Add new variable</a>			

## 3.prod variable

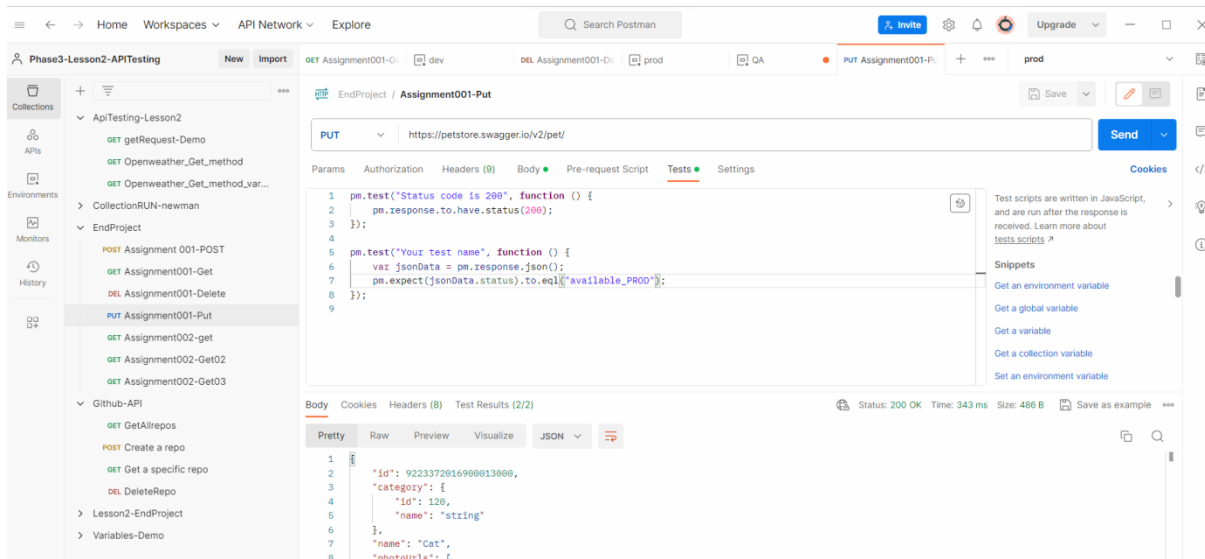
The screenshot shows the Postman interface with the 'prod' environment selected. The left sidebar contains a tree view with 'Environments' expanded, showing 'dev', 'prod', and 'QA'. The main panel displays the 'prod' environment configuration with a table of variables.

Variable	Type	Initial value	Current value
<input checked="" type="checkbox"/> envstatus	default	available_PROD	available_PROD
<input checked="" type="checkbox"/> petid	default	120	120
<input checked="" type="checkbox"/> petname	default	Cat	Cat
<a href="#">Add new variable</a>			

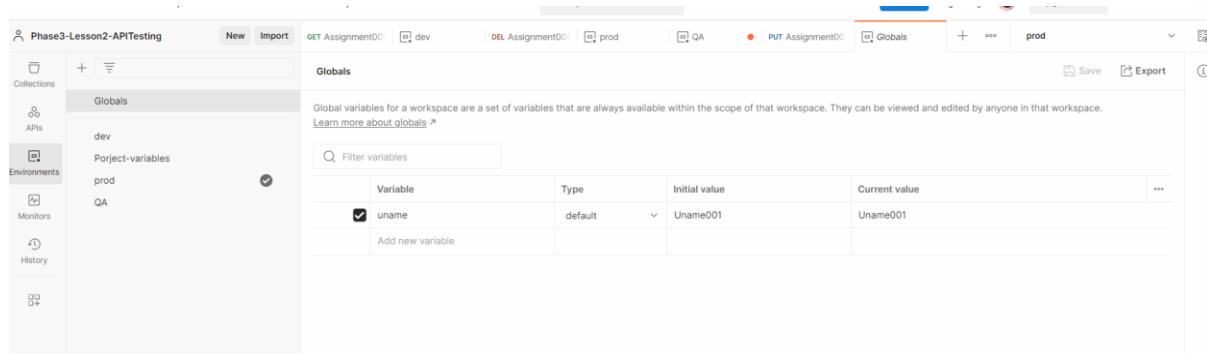


### 3.Postman Assignment003

Hit a GET call with URL: `https://petstore.swagger.io/v2/user/Uname001` Use Uname001 as global parameter • Validate response as 200 in Postman • Validate username = Uname001 in JSON response • Validate email = Positive@Attitude.com in JSON response • Validate userStatus = 1 in JSON response



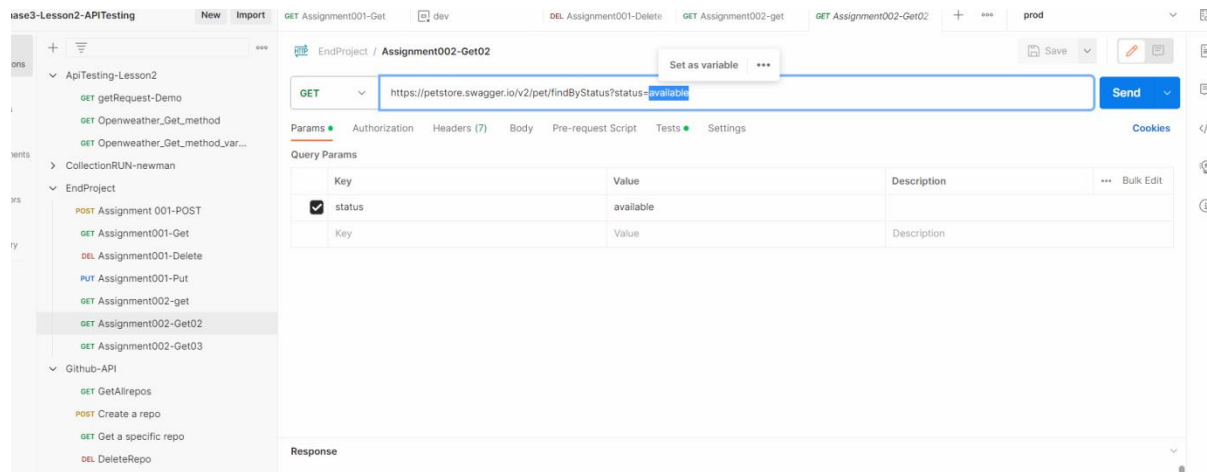




## 4. Postman Assignment004

Hit a GET call with URL: <https://petstore.swagger.io/v2/user/Uname001>

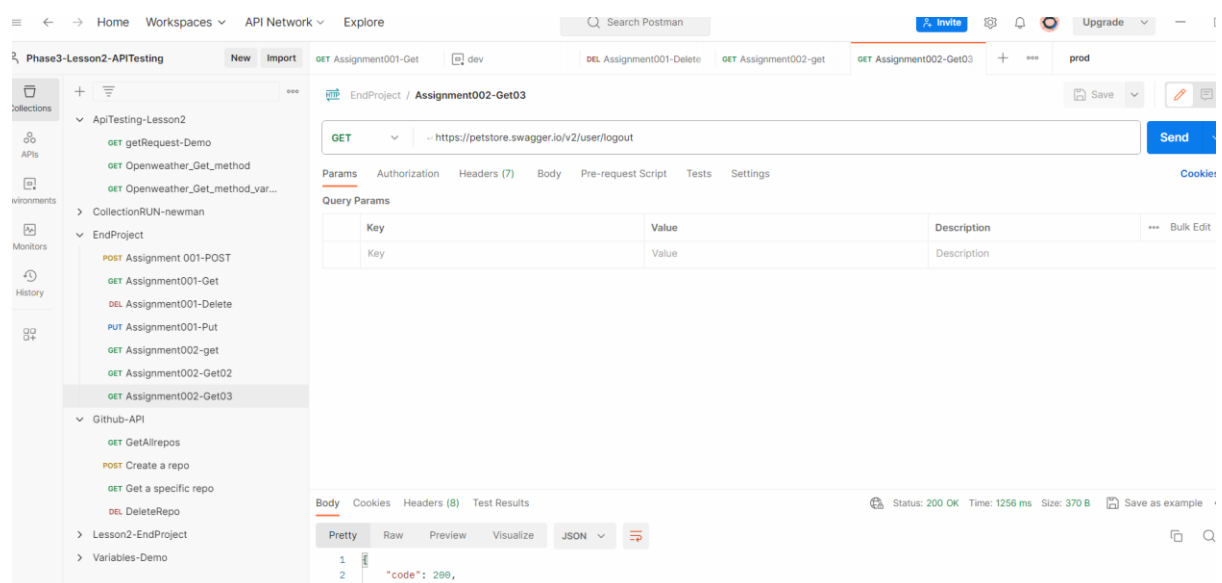
- Use Uname001 as global parameter
- Validate response as 200 in Postman
- Validate username = Uname001 in JSON response
- Validate email = Positive@Attitude.com in JSON response
- Validate userStatus = 1 in JSON response



## 5.Postman Assignment005

Hit a GET call with URL: <https://petstore.swagger.io/v2/user/logout>

- Validate response as 200 in Postman
- Validate code = 200 in response
- Validate message = OK in response



## 1.REST ASURED ASSIGNMENT:001

### Description:

- Open Eclipse/IntelliJ
- Create a Maven project •
- Add Maven dependency for TestNG and REST Assured
- Create a TestNG test with below REST API execution details
- POST CALL ○ URL: <https://petstore.swagger.io/v2/pet> ○ Service Type: POST ○ JSON Body: {  
"id": 344, "category": { "id": 0, "name": "string" }, "name": "Doggie", "photoUrls": [ "string" ],  
"tags": [ { "id": 0, "name": "string" } ], "status": "available" }
- ○ PetID is parameterized ○ Once POST call is successful - validate response code ○ Validate that PetID from response code should be same as request PetID
- ●GET CALL ○ URL: <https://petstore.swagger.io/v2/pet/2003> ○ Service Type: GET ○ Service URL pet id, which is highlighted in YELLOW color should be parameterized and be the same as POST call PetID ○ Validate response code as 200 ○ Validate that response JSON body contains keys status and id ○ Validate status value is available

- DELETE CALL ○ URL: <https://petstore.swagger.io/v2/pet/2003> ○ Service Type: DELETE ○ Service URL pet id, which is highlighted in YELLOW color, should be parameterized and the same as POST call PetID ○ Validate response code is 200 ○ Validate that response JSON body contains keys code and message ○ Validate message value is PetID
- POST→GET→DELETE services are interrelated. If the POST call fails, then the GET and DELETE call will also fail.

## Data file:

```
{
  "id": 987,
  "category": {
    "id": 0,
    "name": "string"
  },
  "name": "duck",
  "photoUrls": [
    "string"
  ],
  "tags": [
    {
      "id": 0,
      "name": "string"
    }
  ],
  "status": "available"
}
```

## Data put file:

```
{
  "id": 987,
  "category": {
    "id": 0,
    "name": "string"
  },
  "name": "duck",
  "photoUrls": [
    "string"
  ],
  "tags": [
    {
      "id": 0,
      "name": "string"
    }
  ],
  "status": "available_QA"
}
```

## Source code :

```

package courseendproject;

import java.io.File;

import org.apache.logging.log4j.LogManager;

import org.apache.logging.log4j.Logger;

import org.hamcrest.Matchers;

import org.testng.annotations.Test;

import io.restassured.RestAssured;

import io.restassured.http.ContentType;


public class Assignment001Demo {

    Logger logger = LogManager.getLogger(Assignment001Post.class);

    @Test(priority='1')

    public void assignment001Post()

    {

        logger.info("Course End project - Assignment001 - POST request");

        File file = new File("resources/data.json");

        int id = RestAssured.given()

            .baseUrl("https://petstore.swagger.io/v2/pet")

            .contentType(ContentType.JSON)

            .body(file)

            .when().post()

            .then()

            .statusCode(200)

            .log().all()
    }
}

```

```

        .body("name", Matchers.equalTo("duck")).extract().path("id");

logger.trace("The status code is checked");

System.out.println(id);

logger.trace("Id has been captured and validated");

}

@Test(priority='2',dependsOnMethods="assignment001Post")
public void assignment001Get()
{

    logger.info("Course End project - Assignment001 - GET request");
    int id = RestAssured.given()

        .baseUrl("https://petstore.swagger.io/v2/pet/987")

        .when()

        .get()

        .then()

        .statusCode(200)

        .log().all()

        .body("status", Matchers.equalTo("available")).extract().path("category.id");

    System.out.println(id); // 0

    logger.trace("Id and status has been captured and validated");

}

```

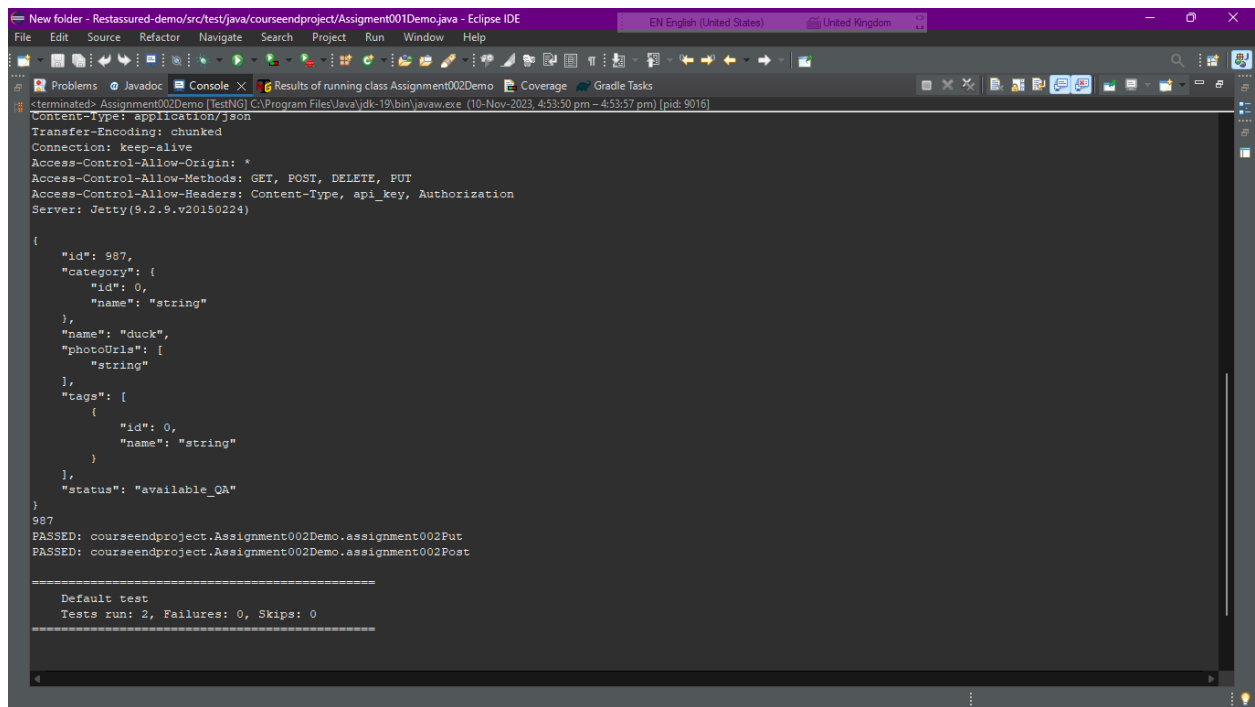
```

@Test(priority='3',dependsOnMethods="assignment001Get")

public void assignment001Delete()
{
    logger.info("Course End project - Assignment001 - Delete request");
    RestAssured.given()
        .baseUrl("https://petstore.swagger.io/v2/pet/987")
        .when()
        .delete()
        .then()
        .statusCode(200)
        .log().all()
        .body("code", Matchers.equalTo(200))
        .body("type", Matchers.equalTo("unknown"))
        .body("message", Matchers.equalTo("987"))
    }
}

```

Output:

The screenshot shows the Eclipse IDE interface with the console window open. The console displays the output of a test run for the class Assignment002Demo. It shows a successful test result with a status of 'available\_QA'. The output includes a JSON object representing a duck with various attributes like id, category, name, photoUrls, tags, and status. The test run summary indicates that 2 tests were run, with 0 failures and 0 skips.

```
<terminated> Assignment002Demo [TestNG] C:\Program Files\Java\jdk-19\bin\javaw.exe (10-Nov-2023 4:53:50 pm - 4:53:57 pm) [pid: 9016]
Content-Type: application/json
Transfer-Encoding: chunked
Connection: keep-alive
Access-Control-Allow-Origin: *
Access-Control-Allow-Methods: GET, POST, DELETE, PUT
Access-Control-Allow-Headers: Content-Type, api_key, Authorization
Server: Jetty(9.2.9.v20150224)

{
  "id": 987,
  "category": {
    "id": 0,
    "name": "string"
  },
  "name": "duck",
  "photoUrls": [
    "string"
  ],
  "tags": [
    {
      "id": 0,
      "name": "string"
    }
  ],
  "status": "available_QA"
}
987
PASSED: courseendproject.Assignment002Demo.assignment002Put
PASSED: courseendproject.Assignment002Demo.assignment002Post

=====
Default test
Tests run: 2, Failures: 0, Skips: 0
=====
```

## 2.REST ASURED ASSIGNMENT:002

### SOURCE CODE:

```
package courseendproject;
```

```
import java.io.File;
```

```
import org.apache.logging.log4j.LogManager;
```

```
import org.apache.logging.log4j.Logger;
```

```
import org.hamcrest.Matchers;
```

```
import org.testng.annotations.Test;
```

```
import io.restassured.RestAssured;
```

```
import io.restassured.http.ContentType;
```

```
public class Assignment002Demo {
```



```
Logger logger = LogManager.getLogger(Assignment002Demo.class);

@Test(priority='1')
public void assignment002Post()
{
    logger.info("Course End project - Assignment002 - POST request");
    File file = new File("resources/data.json");
    int id = RestAssured.given()
        .baseUrl("https://petstore.swagger.io/v2/pet")
        .contentType(ContentType.JSON)
        .body(file)
        .when().post()
        .then()
        .statusCode(200)
        .log().all()
        .body("name", Matchers.equalTo("duck")).extract().path("id");
    logger.trace("The status code is checked");

    System.out.println(id);

    logger.trace("Id has been captured and validated");

}
```

```

@Test(priority='2',dependsOnMethods = "assignment002Post")

public void assignment002Put()
{
    File file = new File("resources/dataput.json");
    int id = RestAssured.given()

        .baseUrl("https://petstore.swagger.io/v2/pet/")

        .contentType(ContentType.JSON)

        .body(file)

        .when()

        .post()

        .then()

        .statusCode(200)

        .log().all()

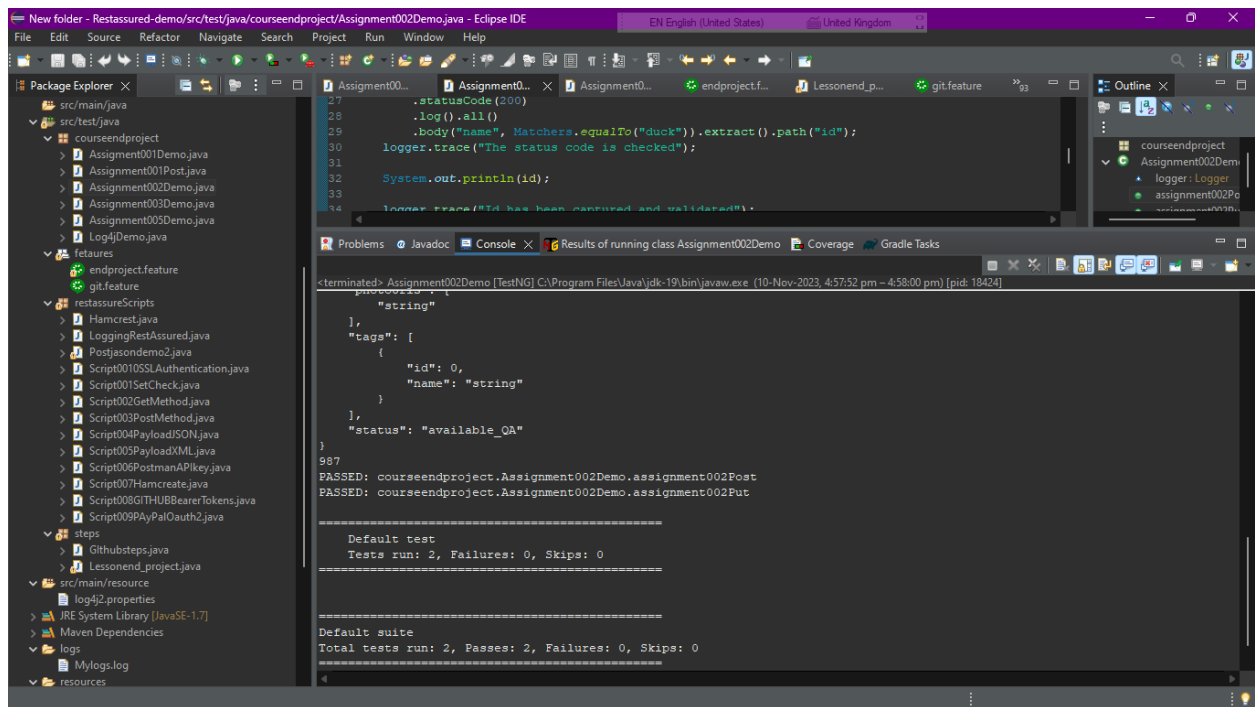
        .body("status", Matchers.equalTo("available_QA")).extract().path("id");

    System.out.println(id);

}
}

```

OUTPUT:



### 3.REST ASURED ASSIGNMENT:003

- To Create a TestNG test and implement the scenario
- Hit a GET call with URL: <https://petstore.swagger.io/v2/user/Uname001>
- All assertion/validation should be done using Hamcrest
- Validate response as 200
- Validate username = Uname001 in JSON response
- Validate email = Positive@Attitude.com in JSON response
- Validate userStatus = 1 in JSON response

Source code:

```
import org.hamcrest.Matchers;
import org.testng.annotations.Test;
```

```
import io.restassured.RestAssured;

public class Assignment003Demo {

    @Test(priority='1')
    public void assignment003User()
    {
        RestAssured.given()

            .baseUrl("https://petstore.swagger.io/v2/user/Uname001")

            .when()

            .get()

            .then()

            .statusCode(200)

            .log().all()

            .body("username", Matchers.equalTo("Uname001"))

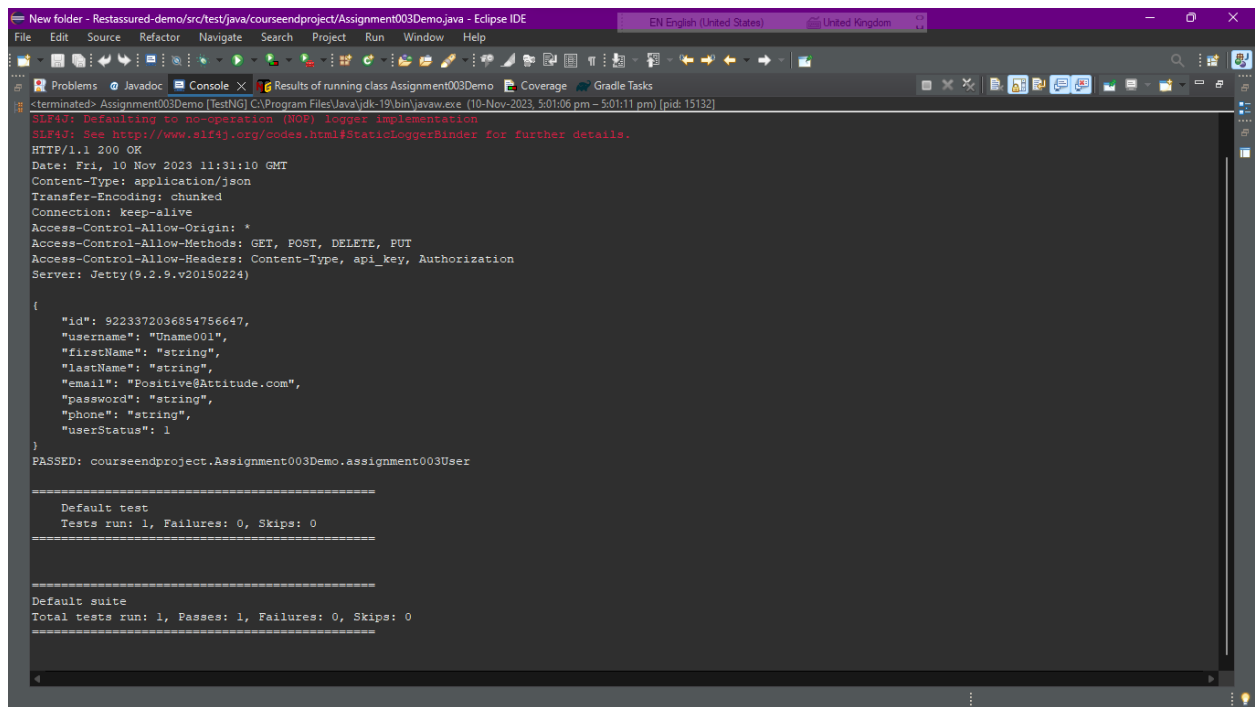
            .body("email", Matchers.equalTo("Positive@Attitude.com"))

            .body("userStatus", Matchers.equalTo(1))

            ;

    }
}
```

OUTPUT:



```
<terminated> Assignment003Demo [TestNG] C:\Program Files\Java\jdk-19\bin\java.exe [10-Nov-2023 5:01:06 pm - 5:01:11 pm] [pid: 15132]
SLF4J: Defaulting to no-operation (NOP) logger implementation
SLF4J: See http://www.slf4j.org/codes.html#StaticLoggerBinder for further details.
HTTP/1.1 200 OK
Date: Fri, 10 Nov 2023 11:31:10 GMT
Content-Type: application/json
Transfer-Encoding: chunked
Connection: keep-alive
Access-Control-Allow-Origin: *
Access-Control-Allow-Methods: GET, POST, DELETE, PUT
Access-Control-Allow-Headers: Content-Type, api_key, Authorization
Server: Jetty(9.2.9.v20150224)

{
  "id": 9223372036854756647,
  "username": "Username001",
  "firstName": "string",
  "lastName": "string",
  "email": "Positive@Attitude.com",
  "password": "string",
  "phone": "string",
  "userStatus": 1
}
PASSED: courseendproject.Assignment003Demo.assignment003User

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

Default suite
Total tests run: 1, Passes: 1, Failures: 0, Skips: 0
=====
```

## 4.REST ASURED ASSIGNMENT:004

SOURCE CODE:

```
package courseEndProject;
```

```
import org.hamcrest.Matchers;
```

```
import org.testng.annotations.Test;
```

```
import io.restassured.RestAssured;
```

```
public class Assignment003Demo {
```

```
    @Test(priority='1')
```

```
    public void assignment003User()
```

```
    {
```

```

RestAssured.given()

    .baseUrl("https://petstore.swagger.io/v2/user/Uname001")

    .when()

    .get()

    .then()

    .statusCode(200)

    .log().all()

    .body("username", Matchers.equalTo("Uname001"))

    .body("email", Matchers.equalTo("Positive@Attitude.com"))

    .body("userStatus", Matchers.equalTo(1));

```

```
@Test(priority='2')
```

```
public void assignment004login()
```

```
{
```

```

    RestAssured.given()

        .baseUrl("https://petstore.swagger.io/v2/user/login")

        .auth().preemptive().basic("Uname001", "@tt!tude")

        .when()

        .get()

        .then()

        .statusCode(200)

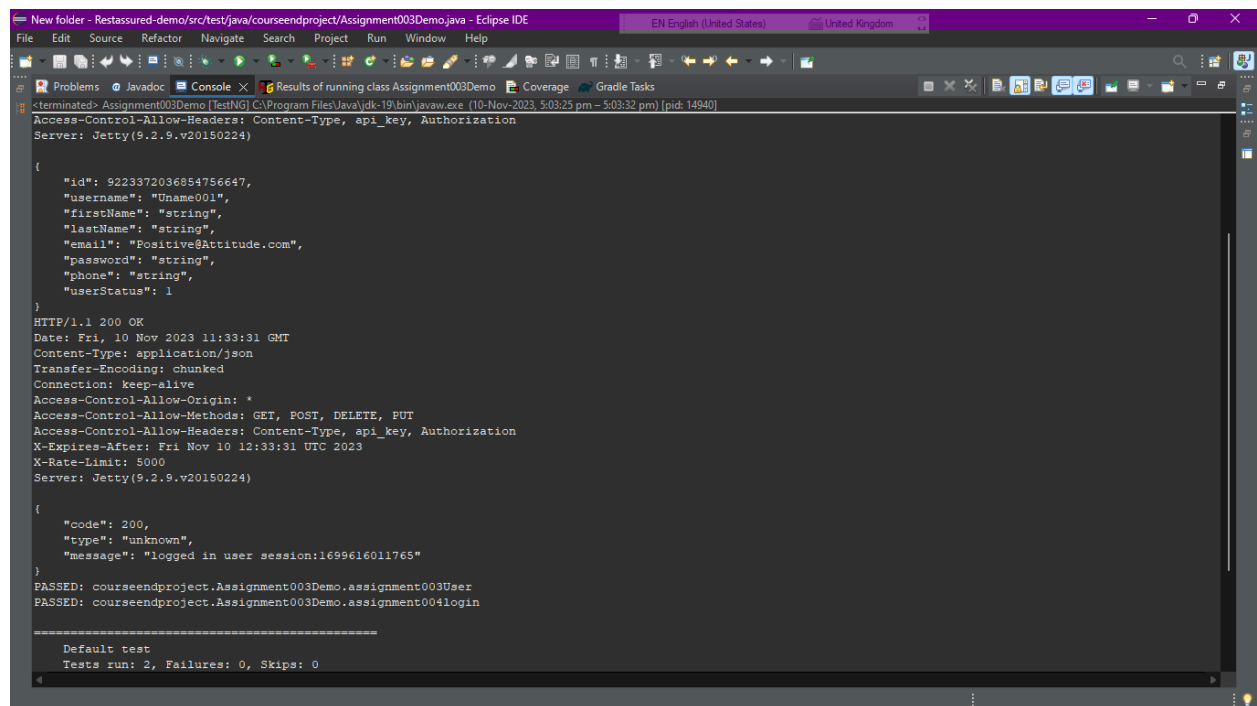
        .log().all()

        .body("message", Matchers.anything());

```

```
}
```

}



```
<terminated> Assignment003Demo [TestNG] C:\Program Files\Java\jdk-19\bin\javaw.exe [10-Nov-2023 5:03:25 pm - 5:03:32 pm] [pid: 14940]
Access-Control-Allow-Headers: Content-Type, api_key, Authorization
Server: Jetty(9.2.9.v20150224)

{
  "id": 9223372036854756647,
  "username": "Uname001",
  "firstName": "string",
  "lastName": "string",
  "email": "Positive@Attitude.com",
  "password": "string",
  "phone": "string",
  "userStatus": 1
}
HTTP/1.1 200 OK
Date: Fri, 10 Nov 2023 11:33:31 GMT
Content-Type: application/json
Transfer-Encoding: chunked
Connection: keep-alive
Access-Control-Allow-Origin: *
Access-Control-Allow-Methods: GET, POST, DELETE, PUT
Access-Control-Allow-Headers: Content-Type, api_key, Authorization
X-Expires-After: Fri Nov 10 12:33:31 UTC 2023
X-Rate-Limit: 5000
Server: Jetty(9.2.9.v20150224)

{
  "code": 200,
  "type": "unknown",
  "message": "logged in user session:1699616011765"
}
PASSED: courseendproject.Assignment003Demo.assignment003User
PASSED: courseendproject.Assignment003Demo.assignment004login

=====
Default test
Tests run: 2, Failures: 0, Skips: 0
```

## 5.REST ASURED ASSIGNMENT:005

### Description:

Create a TestNG test and implement the below scenario

- Hit a GET call with URL: <https://petstore.swagger.io/v2/pet/findByStatus>
- Use REST Assured params as status
- All assertion/validation should be done using Hamcrest
- When status = available and if after hitting the URL, response status = 200, then validate for all pet details that their response status = available
- When status = pending and if after hitting the URL, response status = 200, then validate for all pet details that their response status = pending
- When status = sold and if after hitting the URL, response status = 200, then validate for all pet details that their response status = sold

### SOURCE CODE:

```
import org.hamcrest.Matchers;

import org.testng.annotations.Test;


import io.restassured.RestAssured;

public class Assignment005Demo {

    @Test(priority='1')

    public void assignment005FindByStatus()

    {

        RestAssured.given()

            .baseUrl("https://petstore.swagger.io/v2/pet/findByStatus")

            //queryParam("status", "available")

            //queryParam("status", "pending")

            .queryParam("status", "sold")

            .when()

            .get()

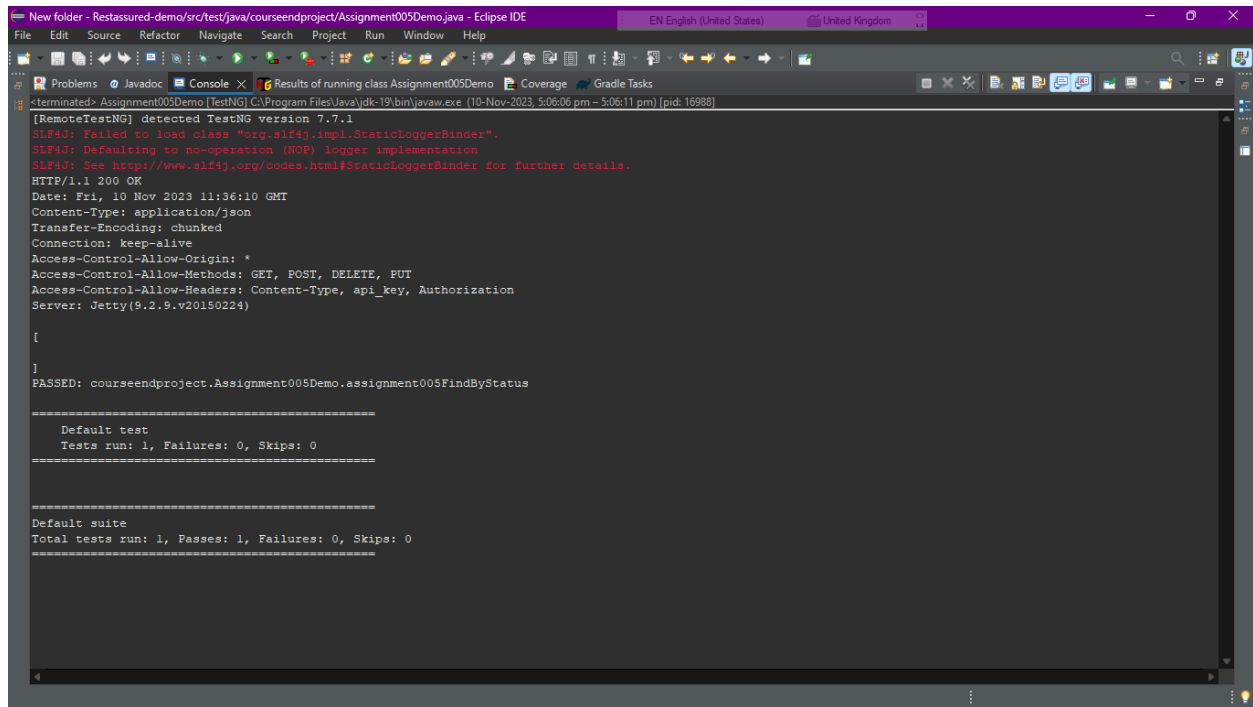
            .then()

            .statusCode(200)

            .log().all();}
```



OUPUT:



```
<terminated> Assignment005Demo [TestNG] C:\Program Files\Java\jdk-19\bin\javaw.exe (10-Nov-2023 5:06:06 pm - 5:06:11 pm) [pid: 16988]
[RemoteTestNG] detected TestNG version 7.7.1
SLF4J: Failed to load class "org.slf4j.impl.StaticLoggerBinder".
SLF4J: Defaulting to no-operation (NOP) logger implementation
SLF4J: See http://www.slf4j.org/codes.html#StaticLoggerBinder for further details.
HTTP/1.1 200 OK
Date: Fri, 10 Nov 2023 11:36:10 GMT
Content-Type: application/json
Transfer-Encoding: chunked
Connection: keep-alive
Access-Control-Allow-Origin: *
Access-Control-Allow-Methods: GET, POST, DELETE, PUT
Access-Control-Allow-Headers: Content-Type, api_key, Authorization
Server: Jetty(9.2.9.v20150224)

{
}
PASSED: courseendproject.Assignment005Demo.assignment005FindByStatus

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

=====
Default suite
Total tests run: 1, Passes: 1, Failures: 0, Skips: 0
=====
```

## 6.REST ASURED ASSIGNMENT:006

### Description:

To Create a TestNG test and implement the below scenario

- Hit a GET call with URL: <https://petstore.swagger.io/v2/user/logout>
- All assertion/validation should be done using Hamcrest
- Validate response as 200
- Validate code = 200 in response
- Validate message = OK in response

### Source code:

```
package courseEndProject;
```

```

import org.hamcrest.Matchers;

import org.testng.annotations.Test;

import io.restassured.RestAssured;

public class Assignment005Demo {

    @Test(priority='1')

    public void assignment005FindByStatus()

    {

        RestAssured.given()

            .baseUrl("https://petstore.swagger.io/v2/pet/findByStatus")

            //queryParams("status", "available")

            //queryParams("status", "pending")

            .queryParams("status", "sold")

            .when()

            .get()

            .then()

            .statusCode(200)

            .log().all() ;}

    @Test(priority='2')

    public void assignment006Logout()

    {

        RestAssured.given()

            .baseUrl("https://petstore.swagger.io/v2/user/logout")

            .when()

            .get()

            .then()

```

```
.statusCode(200)
```

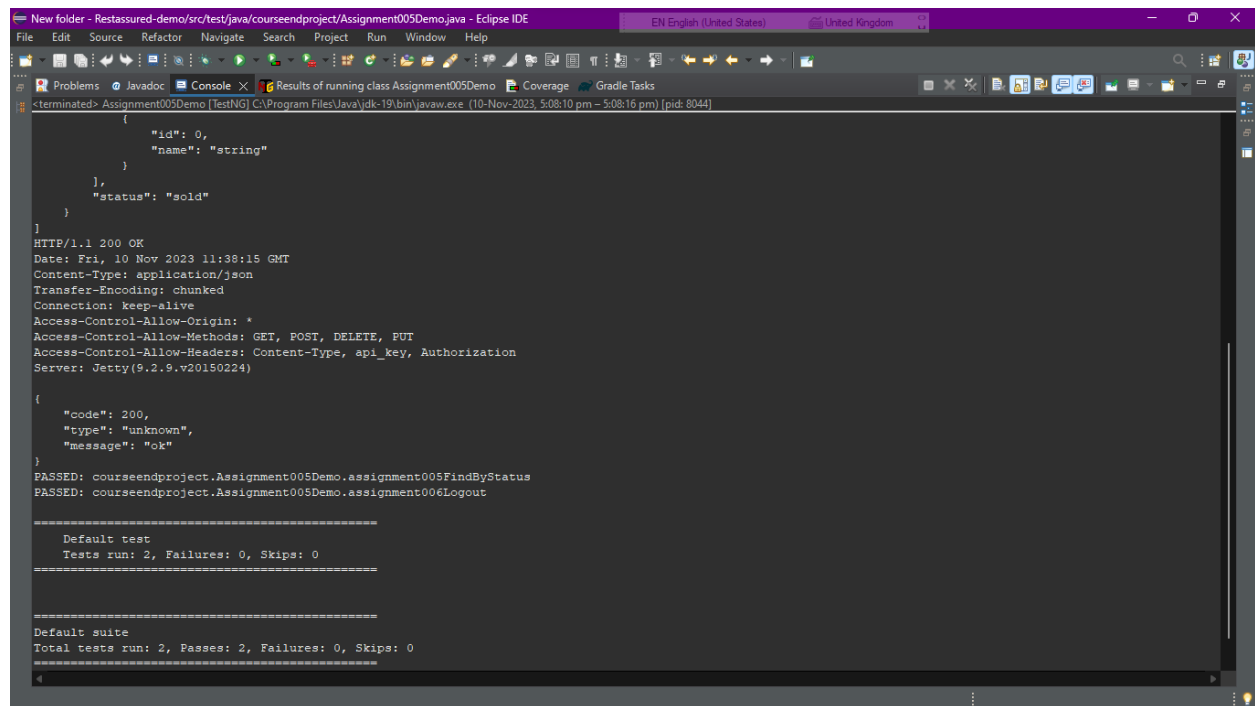
```
.log().all()
```

```
.body("code", Matchers.equalTo(200))
```

```
.body("type", Matchers.equalTo("unknown"))
```

```
.body("message", Matchers.equalTo("ok"));}}}
```

OUTPUT:



```
New folder - Restassured-demo/src/test/java/courseendproject/Assignment005Demo.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Problems Javadoc Console X Results of running class Assignment005Demo Coverage Gradle Tasks
<terminated> Assignment005Demo [TestNG] C:\Program Files\Java\jdk-19\bin\javaw.exe (10-Nov-2023, 5:08:10 pm - 5:08:16 pm) [pid: 8044]
{
  "id": 0,
  "name": "string"
},
"status": "sold"
}
]
HTTP/1.1 200 OK
Date: Fri, 10 Nov 2023 11:38:15 GMT
Content-Type: application/json
Transfer-Encoding: chunked
Connection: keep-alive
Access-Control-Allow-Origin: *
Access-Control-Allow-Methods: GET, POST, DELETE, PUT
Access-Control-Allow-Headers: Content-Type, api_key, Authorization
Server: Jetty(9.2.9.v20150224)

{
  "code": 200,
  "type": "unknown",
  "message": "ok"
}
PASSED: courseendproject.Assignment005Demo.assignment005FindByStatus
PASSED: courseendproject.Assignment005Demo.assignment006Logout

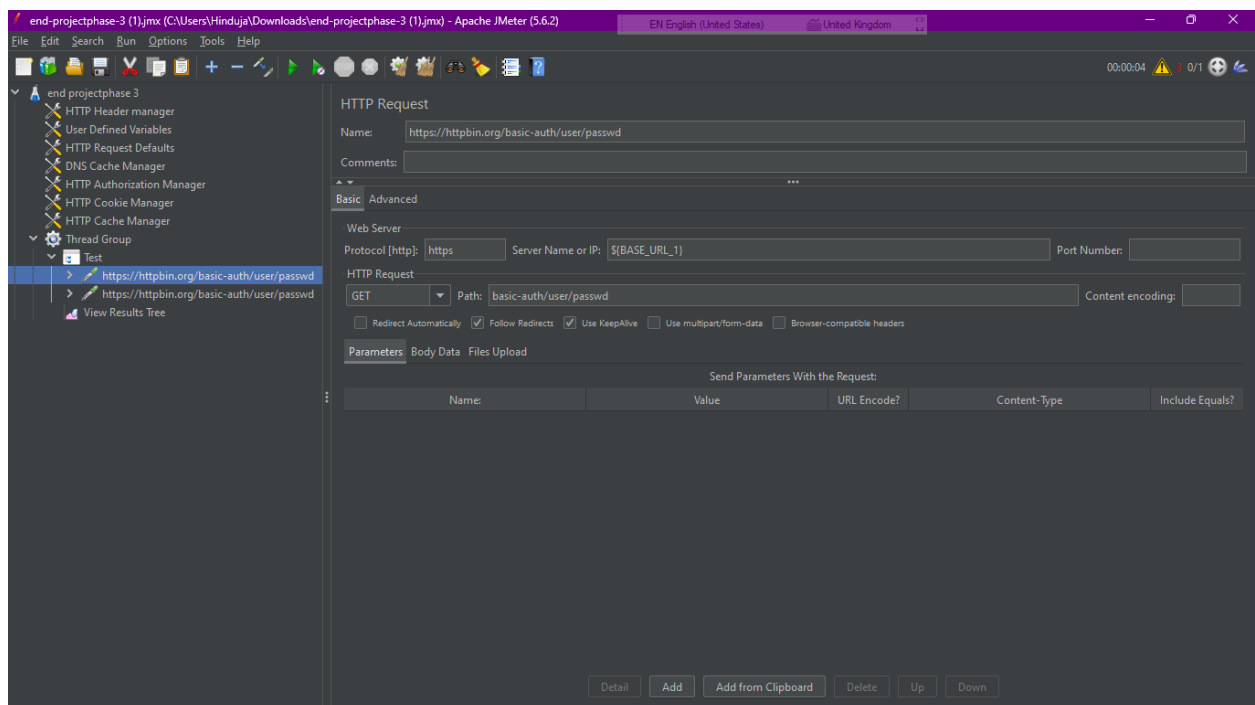
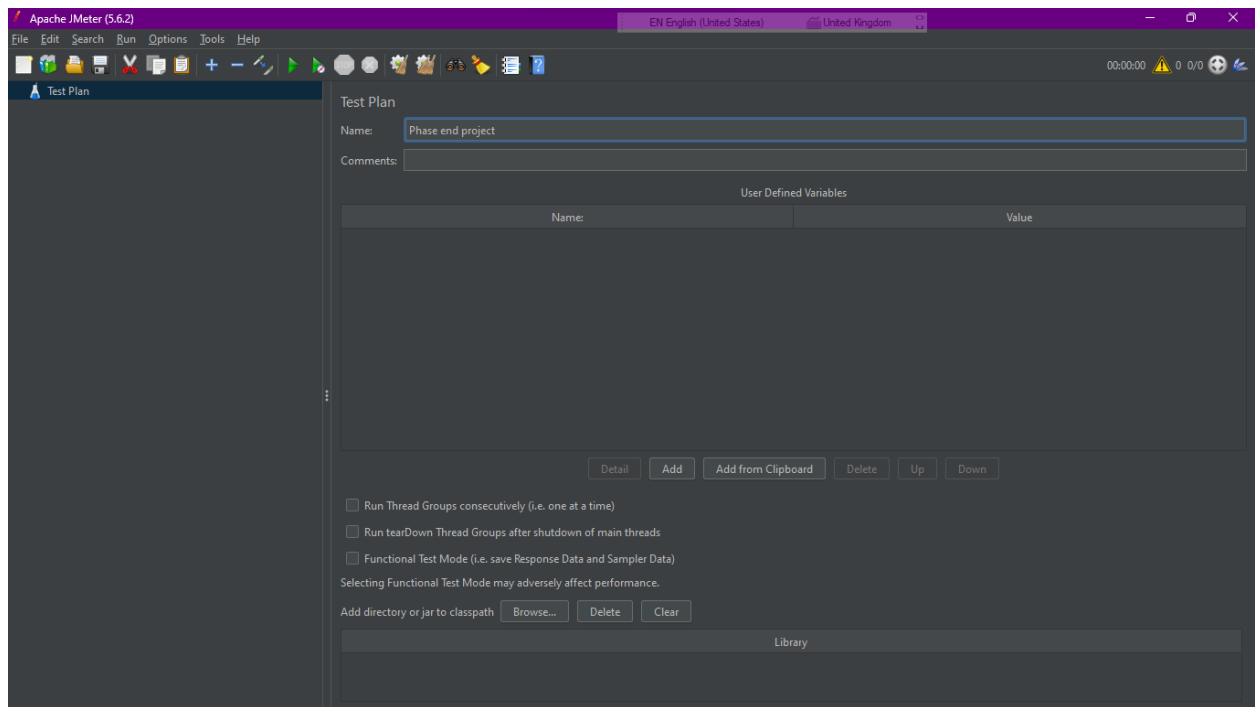
=====
Default test
Tests run: 2, Failures: 0, Skips: 0
=====

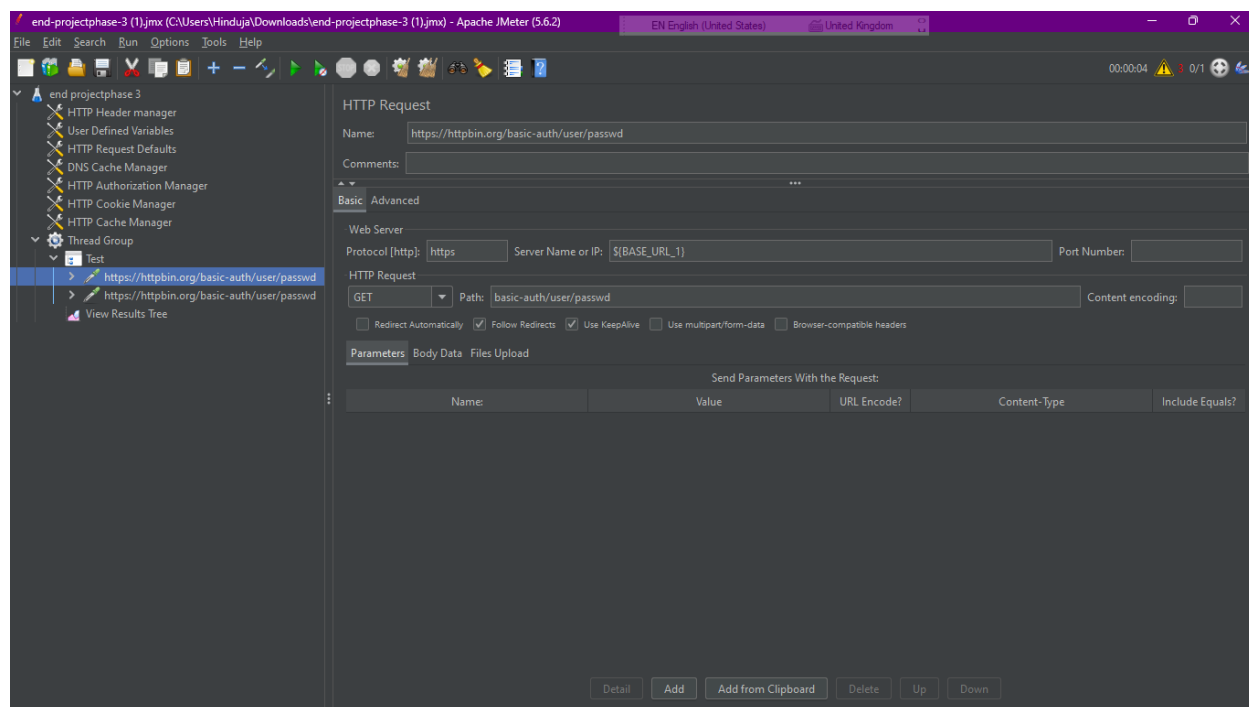
Default suite
Total tests run: 2, Passes: 2, Failures: 0, Skips: 0
=====
```

### **Jmeter Assignment:**

Open JMeter

- Validate <https://httpbin.org/basic-auth/user/passwd> link using HTTP Authentication manager
- Default username is user, and the default password is passwd
- Validate response is a JSON file using JSON assertion
- Using HTTP sampler, hit <https://www.simplilearn.com> and validate xpath as `//img[@title='Simplilearn - Online Certification Training Course Provider']`
- Increase the thread count and do load testing





Out put:

