6. In Postman, test a REST API to demonstrate Authorization by generating a 'Bearer Token' to access a REST API.
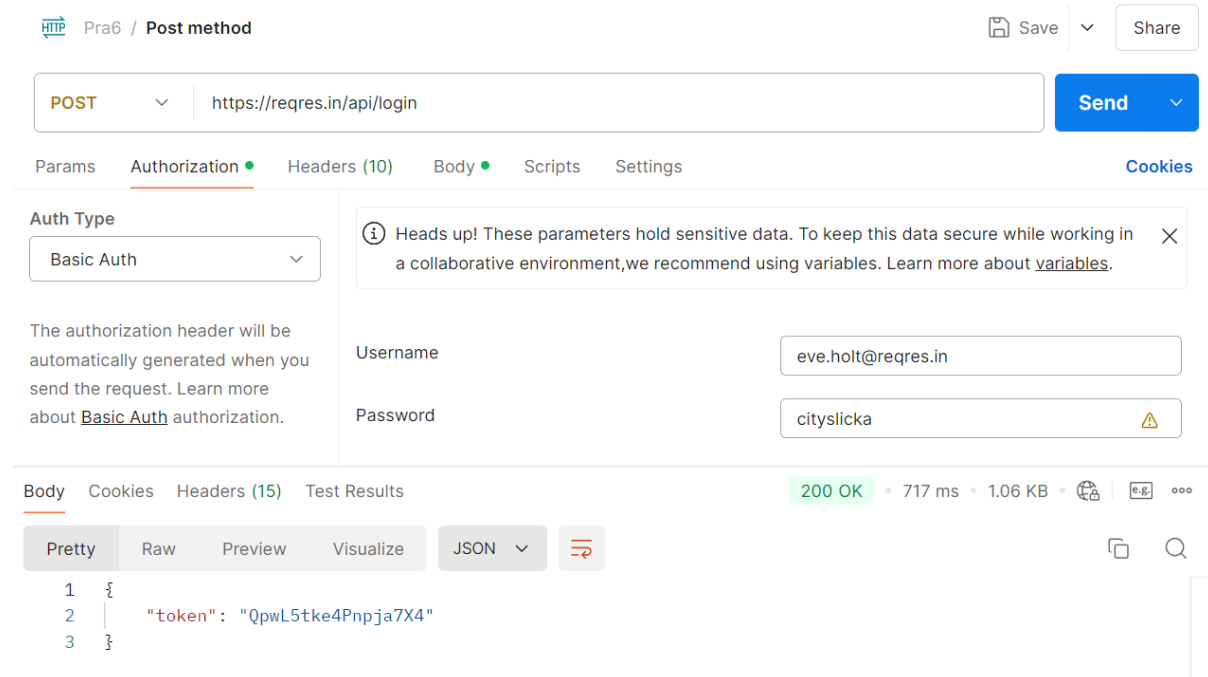
->

Sub Code - P13A4TAR   Sub: Testing and Automation REST API

7. Collection-level authorization and Folder-level Authorization
->
Collection-level authorization:

Folder-level Authorization
->

Sub Code - P13A4TAR   Sub: Testing and Automation REST API

8. Demonstrate how to run POSTMAN requests/tests from command line (newman).

-> Pra 4:

```
C:\MASTER OF COMPUTER APPLICATIONS (MCA)\MCA SEM 3\REST API AND TESTING\Newman>newman run Lab4.postman_collection.json
newman

Lab4

→ Post
  POST https://rahulshettyacademy.com/maps/api/place/add/json?key= qaclick123 [200 OK, 610B, 462ms]

→ Post Method 2
  POST https://rahulshettyacademy.com/maps/api/place/delete/json?key=qaclick123 [404 Not Found, 490B, 1957ms]
```

	executed	failed
iterations	1	0
requests	2	0
test-scripts	0	0
prerequest-scripts	0	0
assertions	0	0
total run duration: 2.5s		
total data received: 263B (approx)		
average response time: 1209ms [min: 462ms, max: 1957ms, s.d.: 747ms]		

Pra 5 :

```
C:\MASTER OF COMPUTER APPLICATIONS (MCA)\MCA SEM 3\REST API AND TESTING\Newman>newman run Lab5.postman_collection.json
newman

Lab 5

→ Post
  POST https://reqres.in/api/login [200 OK, 1.09kB, 1978ms]
  ✓  Status code is 200

→ Get
  GET https://reqres.in/api/login [200 OK, 1.91kB, 198ms]

  [ 'The stored token is: QpwL5tke4Pnpja7X4'
```

	executed	failed
iterations	1	0
requests	2	0
test-scripts	2	0
prerequest-scripts	0	0
assertions	1	0
total run duration: 2.3s		
total data received: 792B (approx)		
average response time: 1088ms [min: 198ms, max: 1978ms, s.d.: 890ms]		

Sub Code - P13A4TAR   Sub: Testing and Automation REST API

Pra 6:

```
C:\MASTER OF COMPUTER APPLICATIONS (MCA)\MCA SEM 3\REST API AND TESTING\Newman>newman run Pra6.postman_collection.json
newman

Pra6

→ Post method
  POST https://reqres.in/api/login [200 OK, 1.08kB, 1793ms]
```

	executed	failed
iterations	1	0
requests	1	0
test-scripts	0	0
prerequest-scripts	0	0
assertions	0	0
total run duration: 1889ms		
total data received: 29B (approx)		
average response time: 1793ms [min: 1793ms, max: 1793ms, s.d.: 0µs]		

Pra 7:

```
C:\MASTER OF COMPUTER APPLICATIONS (MCA)\MCA SEM 3\REST API AND TESTING\Newman>newman run Lab7.postman_collection.json
newman

Lab7

□ Folder-level Authorization
└ Post
  POST https://reqres.in/api/login  [201 Created, 1.16kB, 1964ms]

→ Get
  GET https://reqres.in/api/users/2 [200 OK, 1.49kB, 207ms]
```

	executed	failed
iterations	1	0
requests	2	0
test-scripts	2	0
prerequest-scripts	2	0
assertions	0	0
total run duration: 2.4s		
total data received: 442B (approx)		
average response time: 1085ms [min: 207ms, max: 1964ms, s.d.: 878ms]		

9. Write a RestAssured program of simple GET, POST,PUT and DELETE request. ->

GET :

```java
package pra9;
import io.restassured.RestAssured;
import io.restassured.response.Response;
import org.testng.annotations.*;
public class Pra9 {
        public static void main(String[] args) {
RestAssured.baseURI = "https://jsonplaceholder.typicode.com";

                Response response =
                                given().when()
            .get("/posts")
            .then()
            .statusCode(200)
            .extract().response();

    System.out.println("Response: " + response.asString());

    }

    private static RestAssured given() {
            return null;
    }
    }
```

Output :

```
<terminated> Pra9 [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe  (28-Nov-2024, 9:25:04 pm – 9:25:14 pm) [pid: 15700]
Response: [
  {
    "userId": 1,
    "id": 1,
    "title": "sunt aut facere repellat provident occaecati excepturi optio reprehenderit",
    "body": "quia et suscipit\nsuscipit recusandae consequuntur expedita et cum\nreprehenderit molestiae ut ut quas totam\nnostr
  },
  {
    "userId": 1,
    "id": 2,
    "title": "qui est esse",
    "body": "est rerum tempore vitae\nsequi sint nihil reprehenderit dolor beatae ea dolores neque\nfugiat blanditiis voluptate
  },
  {
```

Sub Code - P13A4TAR   Sub: Testing and Automation REST API

POST :

```java
//POST

    RestAssured.baseURI = "https://jsonplaceholder.typicode.com";

    // Send POST request with the body directly under given()
    Response response = given()
        .contentType(ContentType.JSON)
        .body("{\n" +
            " \"title\": \"New Post Title\",\n" +
            " \"body\": \"This is the body of the new post\",\n" +
            " \"userId\": 1\n" +
            "}")
        .when()
        .post("/posts")
        .then()
        .statusCode(201)
        .body("title", equalTo("New Post Title"))
        .extract().response();


    System.out.println("Response: " + response.asString());
```

Output:

```
<terminated> Pra9 [Java Application] C:\Program Files\Java\jdk-17
  "title": "New Post Title",
  "body": "This is the body of the new post",
  "userId": 1,
  "id": 101
}
```

PUT :

```java
RestAssured.baseURI = "https://jsonplaceholder.typicode.com";

            Response response = given()
                .contentType(ContentType.JSON)  // Set content type as JSON
                .body("{\n" +
```

Sub Code - P13A4TAR   Sub: Testing and Automation REST API

```
                " \"id\": 1,\n" +
                " \"title\": \"New title\",\n" +
                " \"body\": \"New Body\",\n" +
                " \"userId\": 1\n" +
                "}")
            .when()
            .put("/posts/1")
            .then()
            .statusCode(200)
            .extract().response();


        System.out.println("Response: " + response.asString());
```

Output :

```
<terminated> Pra9 [Java Application]
  "id": 1,
  "title": "New title",
  "body": "New Body",
  "userId": 1
}
```

DELETE :

```
RestAssured.baseURI = "https://jsonplaceholder.typicode.com";

        Response response = given()
        .when()
        .delete("/posts/1")
        .then()
        .statusCode(200)
        .extract().response();
            System.out.println("Response: " + response.asString());
            System.out.println("Delete Successfully");
```

Output:

```
<terminated> Pra9 [Java Application] (
Response: {}
Delete Successfully
```

Sub Code - P13A4TAR   Sub: Testing and Automation REST API