Aim: To perform the demonstrate OAuth authorization in REST API using REST assured.

CODE:

```
package restAssurescripts;

import org.testng.Assert;
import org.testng.annotations.Test;

import io.restassured.RestAssured;
import io.restassured.response.Response;


public class Script009PayPalOauth2 {


        String  accessToken;


        @Test(priority='1')
        public void GetAccessToekn()
        {
String clientID = "AZ5SJTYFDG7mkWlS9cR3Ld-4ZlSSFZXVwI7OqoIEHsjm-
KVFqQgb5tp0_oRPt9gmNWiIe3JO0b7Zf9tn";



String clinetsecret = "EAM1k_e0XIVyvHK6_80SaZhA-yvXYD70f6-49f-I6C8EePtaytw66yYuZSjbbGe-
U4M-4hZ8gG2y2EXT";



        Response res = RestAssured.given()
                .baseUri("https://api-m.sandbox.paypal.com")
                .basePath("/v1/oauth2/token")
                .auth().preemptive().basic(clientID, clinetsecret)
```

```java
            .param("grant_type", "client_credentials")

            .when().post();


    Assert.assertEquals(res.statusCode(), 200);


    accessToken = res.getBody().path("access_token");


    System.out.println(accessToken);


    }


    @Test(priority='2')
    public void paypalTestAPI()
    {
    Response res =  RestAssured.given()

            .baseUri("https://api-m.sandbox.paypal.com")

            .basePath("/v1/invoicing/invoices")

            .queryParam("page", "3")

            .queryParam("page_size", "4")

            .queryParam("total_count_required", true)

            .auth().oauth2(accessToken)

            .when().get();


    res.prettyPrint();
```

```
        }

}

OUTPUTS:
```

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer
- ATE-phase3-RestAssured
  - src/main/java
  - src/test/java
    - features
      - github.feature
      - lessonendproject.feature
    - restAssurescripts
      - Script0010SSIAuthentication.java
      - Script001SetupCheck.java
      - Script002GetMethod.java
      - Script003PostMethod.java
      - Script004PayloadJSON.java
      - Script005PayloadXML.java
      - Script006PostManAPIKey.java
      - Script007HamcrestValidateMethods.java
      - Script008GithubBREARERToken.java
      - Script009PayPalOauth2.java
    - steps
      - Githubsteps.java
      - LessonEndProject.java
  - JRE System Library [JavaSE-1.7]
  - Maven Dependencies
  - src
  - target
  - test-output
  - pom.xml
- JAVA-Programs
- JDBC-DEmo
- JmeterJunitSampler
- Selenium
- TestNG

```java
package restAssurescripts;

import org.testng.Assert;

    Run ALL
public class Script009PayPalOauth2 {

    String accessToken;

    @Test(priority='1')
    Run | Debug
    public void GetAccessToekn()
    {
    String clientID = "AZ5SJTYFDG7mkWlS9cR3Ld-4ZlSSFZXVwI7OqoIEHsjm-KVFqQgb5tp0_oRPt9gmNWiIe3JO0b7Zf9tn";

    String clinetsecret = "EAM1k_e0XIVyvHK6_80SaZhA-yvXYD70f6-49f-I6C8EePtaytw66yYuZSjbbGe-U4M-4hZ8gG2y2EXT";

            Response res = RestAssured.given()
                .baseUri("https://api-m.sandbox.paypal.com")
                .basePath("/v1/oauth2/token")
                .auth().preemptive().basic(clientID, clinetsecret)
                .param("grant_type", "client_credentials")
                .when().post();


        Assert.assertEquals(res.statusCode(), 200);

        accessToken = res.getBody().path("access_token");

        System.out.println(accessToken);

    }


    @Test(priority='2')
    Run | Debug
```

Problems Javadoc Declaration Console Results of running class Script009PayPalOauth2

<terminated> Script009PayPalOauth2 [TestNG] C:\Users\siva reddy\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.8.v20230831-1047\jre\bin\javaw.exe (09-Nov-2023, 7:53:56 pm – 7:54:04 pm) [pid: 38(
[RemoteTestNG] detected TestNG version 7.7.1

File Edit Source Refactor Navigate Search Project Run Window Help

```java
package restAssurescripts;

import org.testng.Assert;
```

Problems Javadoc Declaration Console Results of running class Script009PayPalOauth2

<terminated> Script009PayPalOauth2 [TestNG] C:\Users\siva reddy\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.8.v20230831-1047\jre\bin\javaw.exe (09-Nov-2023, 7:53:56 pm – 7:54:04 pm) [pid: 38(
[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.
A21AALrOuv5tktmPNXPvq_9EGWss14ESXoqUSCPG7OFbkOhUiv9HAUd8qXtFwUpIDr9UyJuxidfj9fVxTitrS69o6sAT6jSpA
```

```json
{
    "total_count": 0,
    "invoices": [

    ],
    "links": [
        {
            "rel": "self",
            "href": "https://api.sandbox.paypal.com/v1/invoicing/invoices?page=3&page_size=4&total_count_required=true",
            "method": "GET"
        }
    ]
}
```

```
PASSED: restAssurescripts.Script009PayPalOauth2.GetAccessToekn
PASSED: restAssurescripts.Script009PayPalOauth2.paypalTestAPI

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


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

File Edit Source Refactor Navigate Search Project Run Window Help

```java
package restAssurescripts;

import org.testng.Assert;
```

Problems Javadoc Declaration Console Results of running class Script009PayPalOauth2

Search:
Passed: 2 Failed: 0 Skipped: 0   Tests: 1/1 Methods: 2 (6299 ms)

All Tests Failed Tests Summary

- Default suite (2/0/0/0) (5.781 s)
  - Default test (5.781 s)
    - restAssurescripts.Script009PayPalOauth2
      - GetAccessToekn (5.191 s)
      - paypalTestAPI (0.59 s)

Failure Exception