**Working with REST API in JMeter**

-- API stands for Application Programming Interface

-- REST stands for Representational State Transfer

-- REST API is a set of rules that allow programs to talk to each other- used to interact data between applications developed in two different language

-- The developer creates the API on the server and allows the client to talk to it

-- REST API is nothing but an URL

-- An REST API is made up of four things-

The endpoint-URL with complete path

The Method-GET, POST

The Headers

The data or Body

-- Above informations will be mentioned in the API Swagger Specification documents

-- we can use **https://editor.swagger.io/** to understand API informations in details

-- Let’s take the follwing REST APIs to understand how do we work with REST API in JMeter

-- Launch the below URL and Sign in to get the username and password

**https://api.octoperf.com/**

-- Now use below REST API to get the token in the JSON response -Pass username and password as parameters in HTTP Request

**https://api.octoperf.com/public/users/login**

-- Extract the token using JSON Extractor- Use JSON expression= **$.token**

-- Use below REST API to get the list of workspaces-Pass token as Authorization in HTTP Header Manager

[**https://api**](https://api)**.octoperf.com/workspaces/member-of**

**--** Use below REST API to get the project details- Pass WorkspaceID as Authorization in HTTP Header

[**https://api.octoperf.com/design//projects/by-workspace/O43OynEBlhUq-QGD6mS0/DESIGN**](https://api.octoperf.com/design//projects/by-workspace/O43OynEBlhUq-QGD6mS0/DESIGN)

**--** Write the below code in JSR223 Postprocessor to log into JMeter logs

String JsonToken = vars.get("Token");

log.info ("The caaptured Toen is: " + JsonToken);

**Responses:-**

**Request1:- {"token":"1ea2fb53-9de5-4811-920b-035fc5a3ad54"}**

**Request2:-**

**[{**

**"created": 1588245490355,**

**"description": "",**

**"id": "O43OynEBlhUq-QGD6mS0",**

**"lastModified": 1588245490355,**

**"name": "Default",**

**"userId": "Oo3OynEBlhUq-QGD6mSI"**

**}]**

**Request3:-**

**[{**

**"created": 1588245490970,**

**"description": "This project contains only a sample virtual user. You can open it to easily discover OctoPerf.",**

**"id": "V43OynEBlhUq-QGD7mSh",**

**"lastModified": 1588245491359,**

**"name": "Sample project",**

**"tags": [],**

**"type": "DESIGN",**

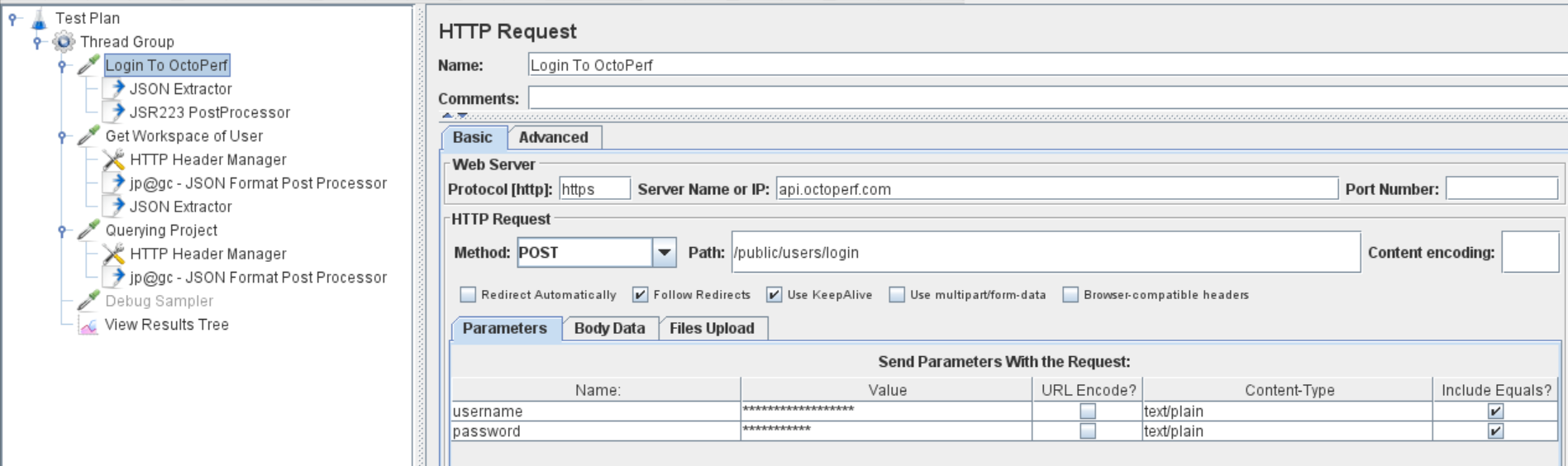
**"userId": "Oo3OynEBlhUq-QGD6mSI",**

**"workspaceId": "O43OynEBlhUq-QGD6mS0"**

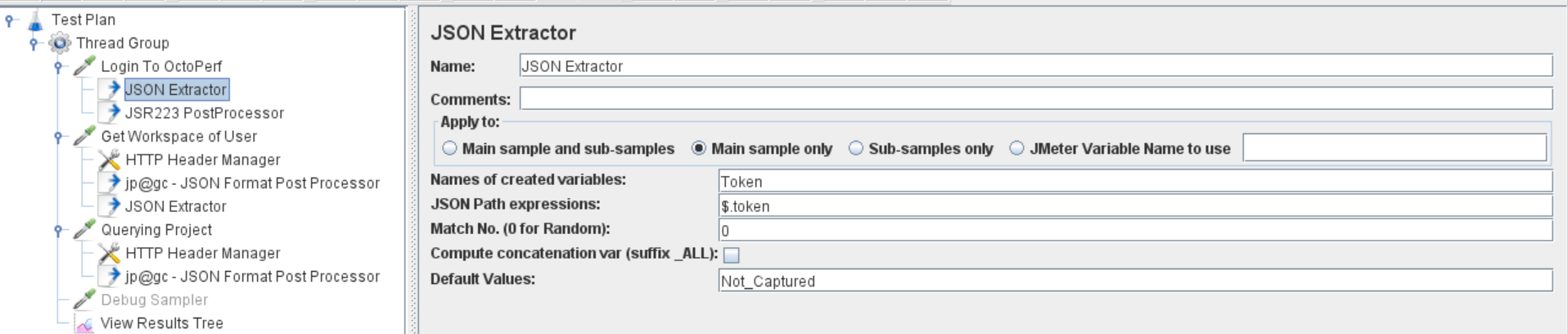
**}]**

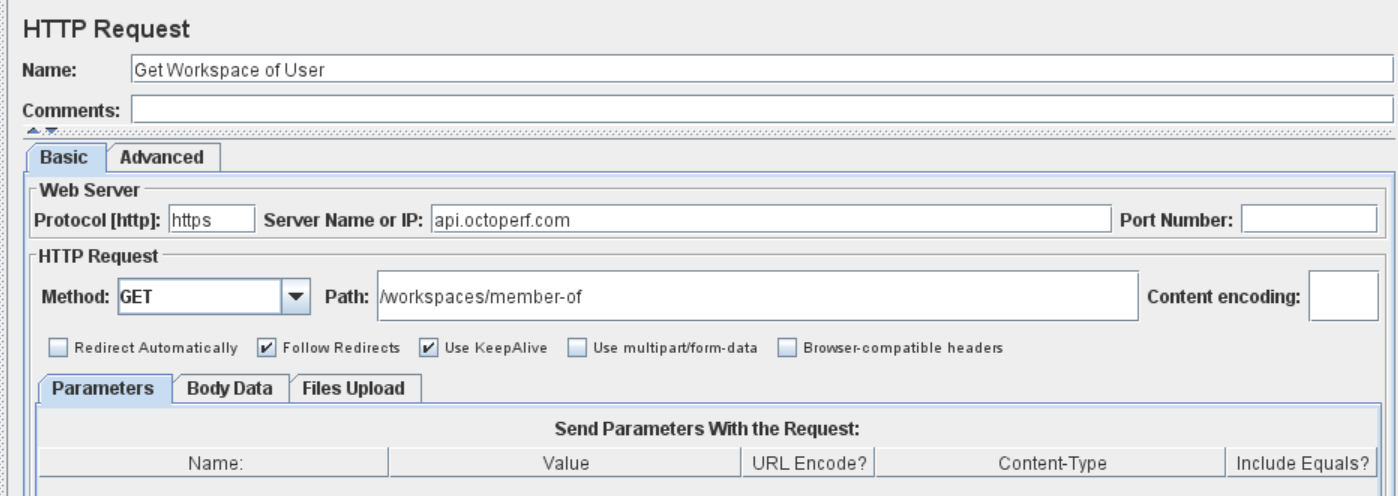
**Some Screenshots of Scripts: -**

**Request1:-**

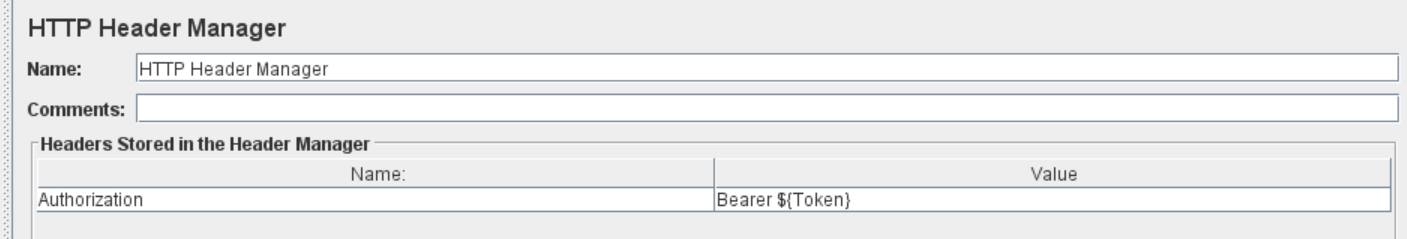


**Token Extraction from Request1:-**



**Request2:-**

**Passing token into Request2:-**



**Request3:-**

