**Lab Exercise 8– Using AssignMessage Policy to Handle Request Parameters**

**Objective**

* Create an API Proxy that:
  + Accepts a query parameter name
  + Uses **AssignMessage** to:
    - Add a custom header X-User-Name using the name query param
    - Forward the modified request to a backend
  + Returns the backend response to the client

**Setup Steps**

**Step 1: Create a New API Proxy**

1. Go to **Apigee Edge / Apigee X UI**
2. Navigate to **Develop > API Proxies > +Proxy**
3. Choose **Reverse Proxy**
4. Enter:
   * **Name:** AssignMessageDemo
   * **Base Path:** /assignmsg
   * **Target URL:** https://httpbin.org/get (this echoes request data)
5. Click **Next**, then **Done** to create the proxy

**Step 2: Create the AssignMessage Policy**

In your proxy folder:

* Go to apiproxy/policies/
* Create a new file named AddHeaderFromQueryParam.xml

<AssignMessage name="AddHeaderFromQueryParam">

<DisplayName>Add Header from Query Param</DisplayName>

<Set>

<Headers>

<Header name="X-User-Name">{request.queryparam.name}</Header>

</Headers>

</Set>

<AssignTo createNew="false" type="request"/>

</AssignMessage>

**Step 3: Attach the Policy to ProxyEndpoint**

1. Open the file: apiproxy/proxies/default.xml
2. Inside the <PreFlow> under <Request>, insert this step:

<PreFlow name="PreFlow">

<Request>

<Step>

<Name>AddHeaderFromQueryParam</Name>

</Step>

</Request>

<Response/>

</PreFlow>

**Step 4: Deploy the Proxy**

1. In the Apigee UI, go to the **Develop tab > Deployments**
2. Select the environment (test, eval, etc.)
3. Click **Deploy** your AssignMessageDemo proxy

**Step 5: Test the Proxy**

Use **curl** or **Postman**:

curl "https://your-org-name.apigee.net/assignmsg?name=John"

You should see a response from httpbin.org that includes a header:

"X-User-Name": "John"

**Expected Behavior**

* The API receives the query parameter name=John
* The AssignMessage policy creates a new header: X-User-Name: John
* The backend at httpbin.org/get returns the full request, including that header