Creating service principle like a admin

We are retriving data from 0365 which is having confidential data about organization like employees details(outlook id,creation dates,permissions,location) .Instead of providing access to individual users ,we are creating userid with admin level permissions

**Please follow 1 to 4 steps for creating app registration and client secret**

User name= app registration id

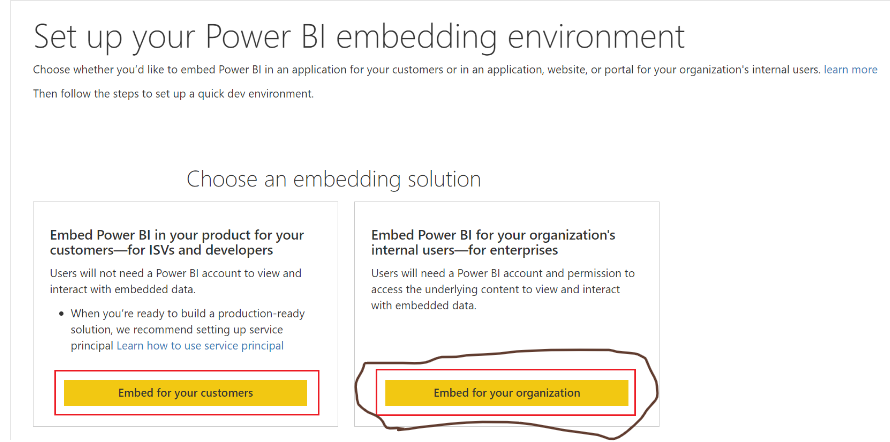
Password= client secret

Reference---<https://learn.microsoft.com/en-us/purview/create-service-principal-azure>

**Step 1.1**

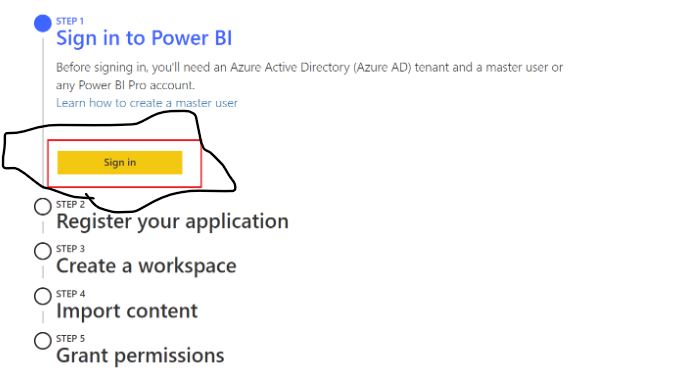
Visit below given link and click on embedded for your organisation

Developer app registration tool-<https://dev.powerbi.com/apps>



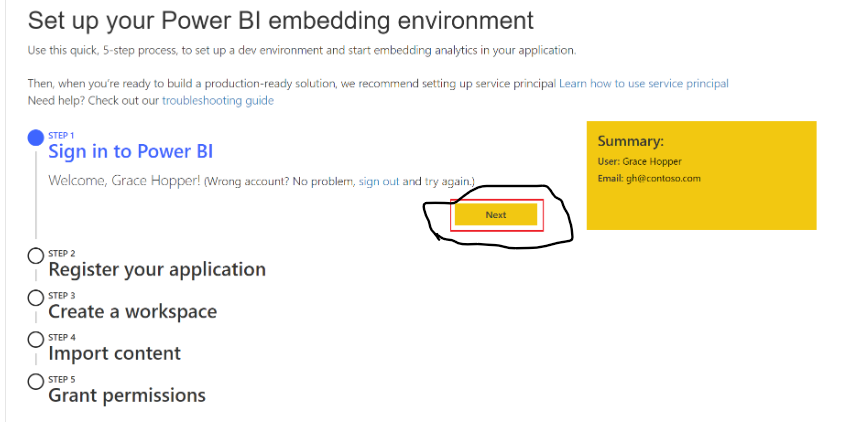
**Step 1.2**

Click on Sign in



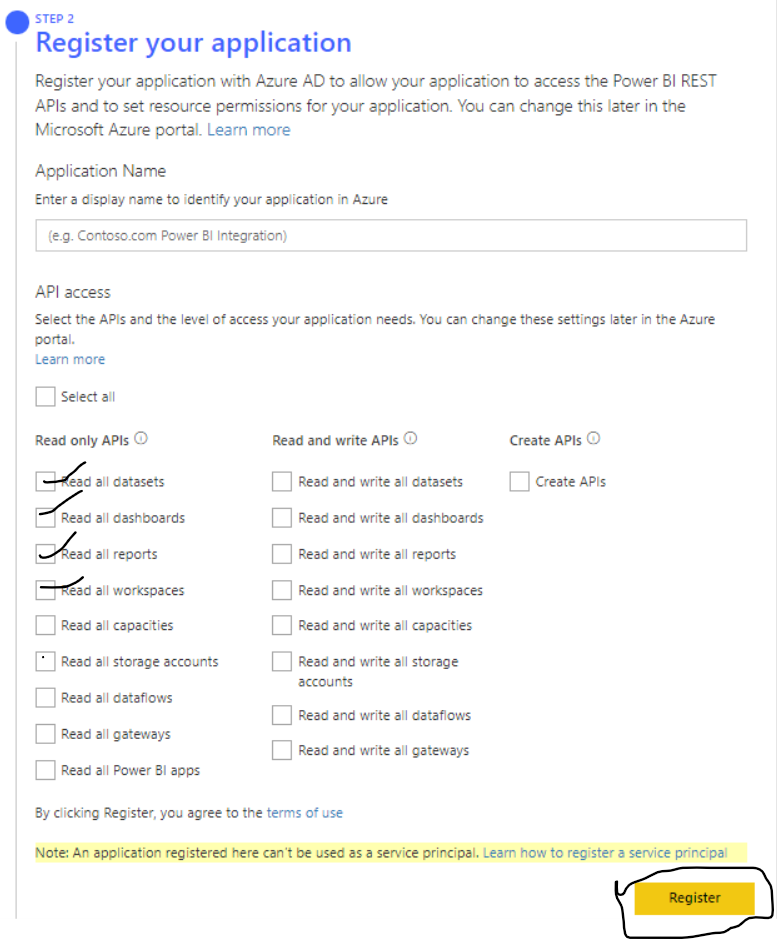
**Step 1.3**

Click on **Next**



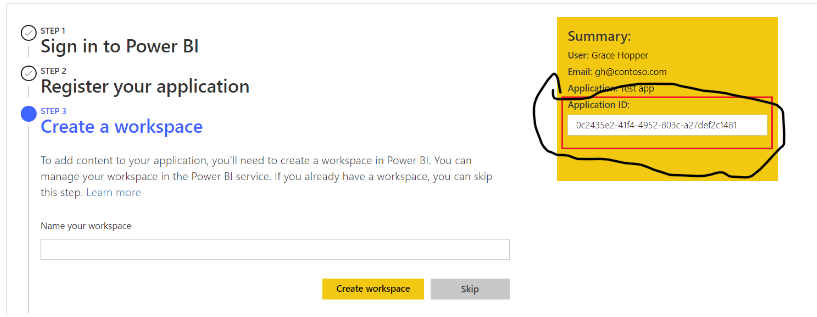
**Step 1.4**

Click on required API’S needed to develop a report and click on **Register**



**Step 1.5**

Copy application ID and click on skip to avoid creating workspace

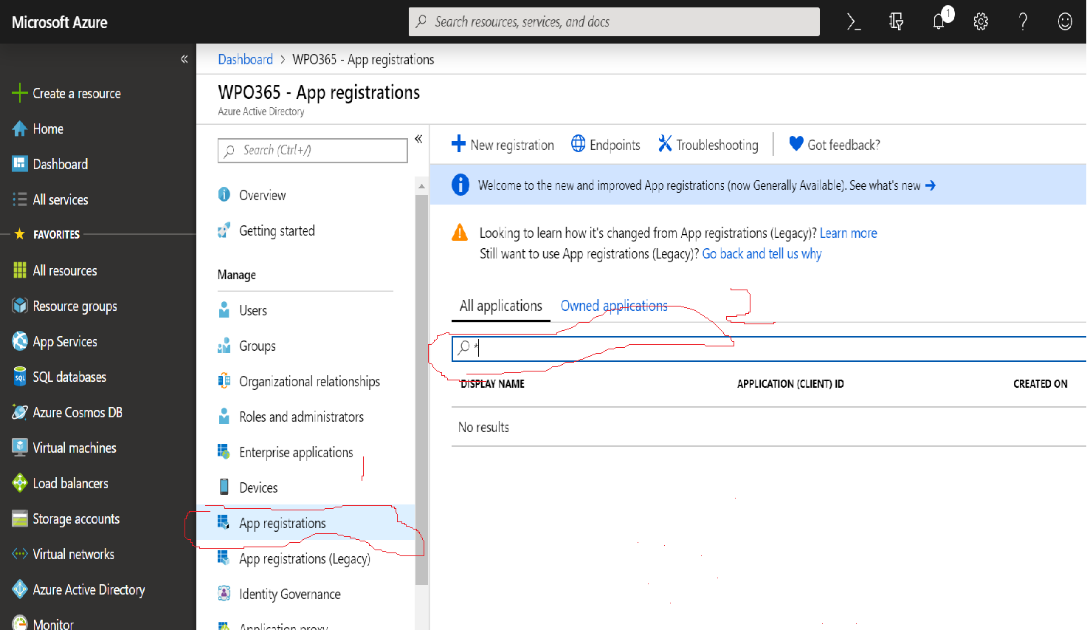


**Step 2-Creating client scret key and providing more permissions to application id**

**Step 2.1**

Log into [Microsoft Azure](https://ms.portal.azure.com/#allservices).

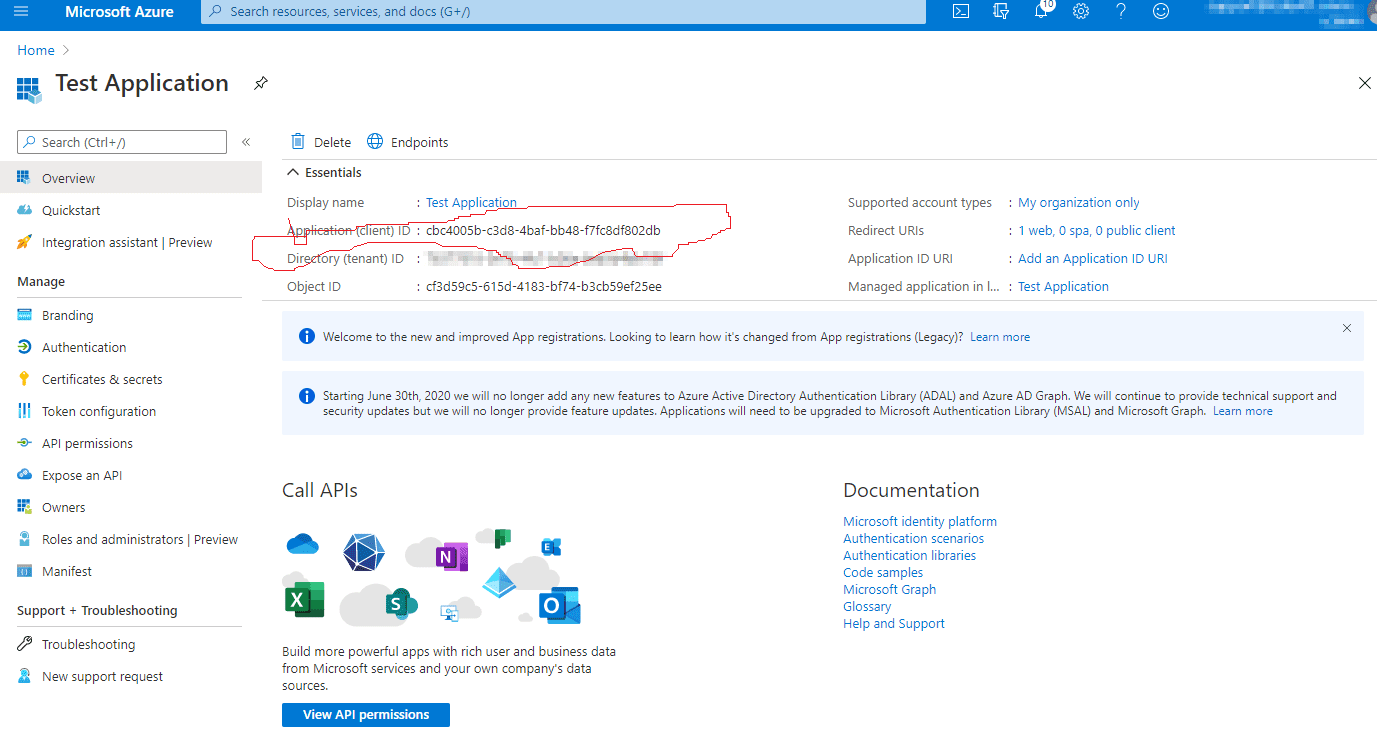
Search for **Azure Active directory>Search box>Above copied application id**



**Step 2.2**

Inside application,above copy application id and below image rounded application id should be same

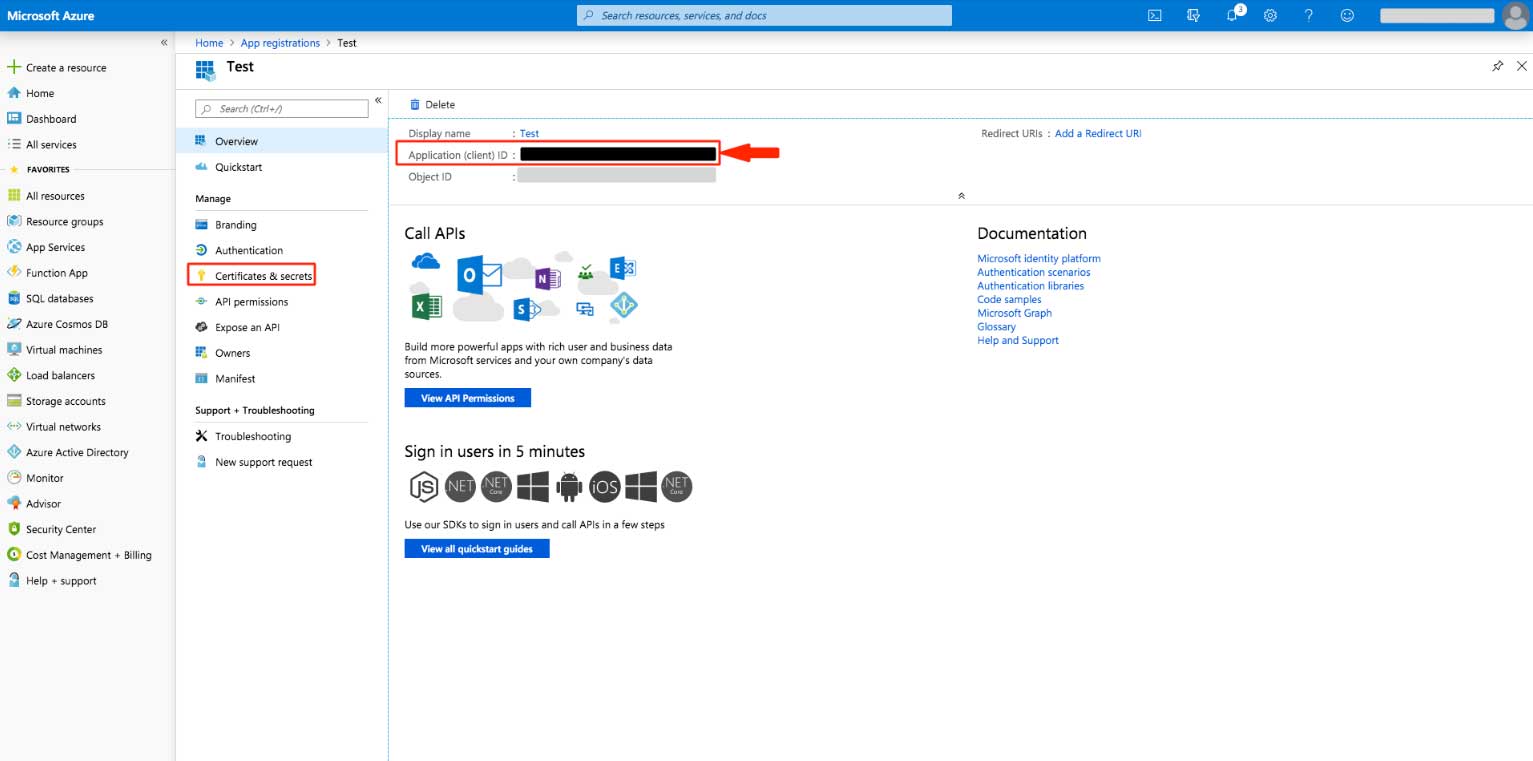
Note-application id in Step 1.5 and below image should be same



**STEP3-Creating client secret key /password**

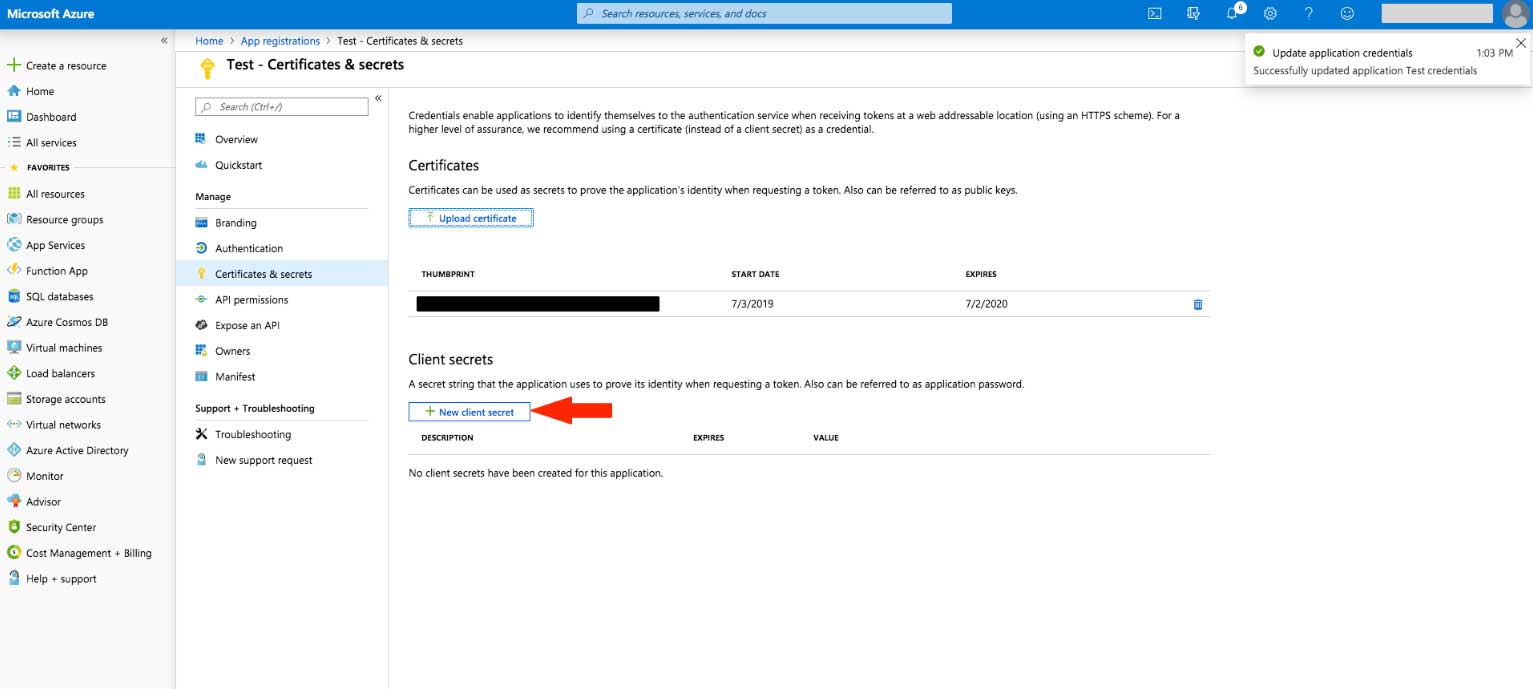
**Step 3.1**

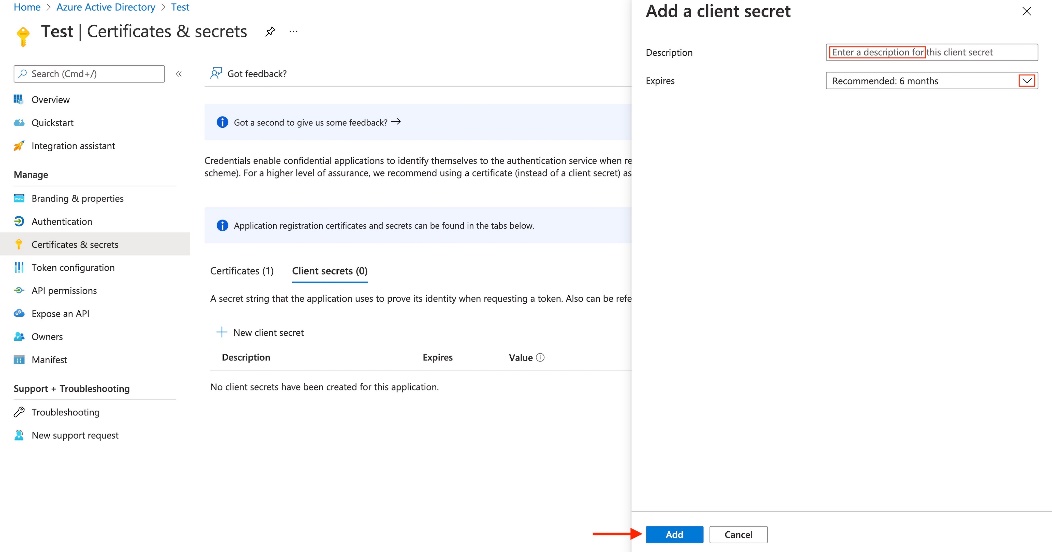
Below image is used for creating password by using client secret key for service principle



**Step 3.2**

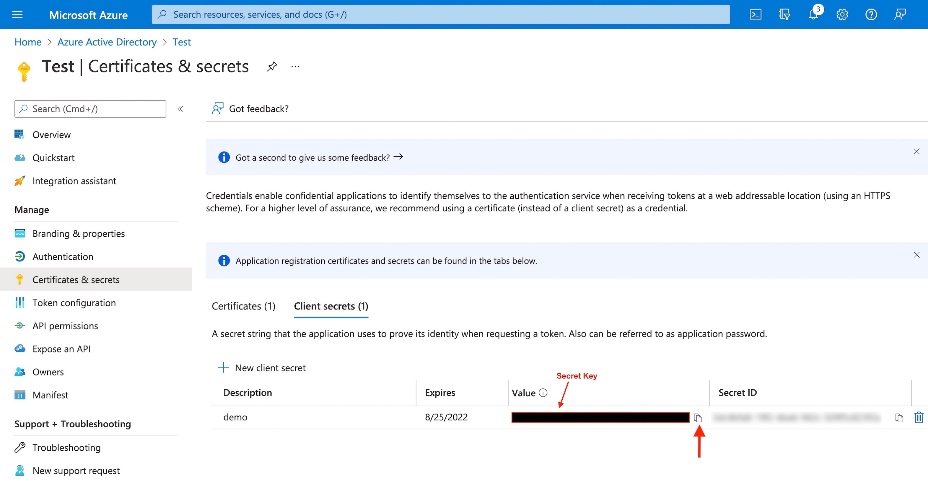
Click on new client secret





**Step 3.3**

Enter **description**, select **expiry time** and click on **Add**



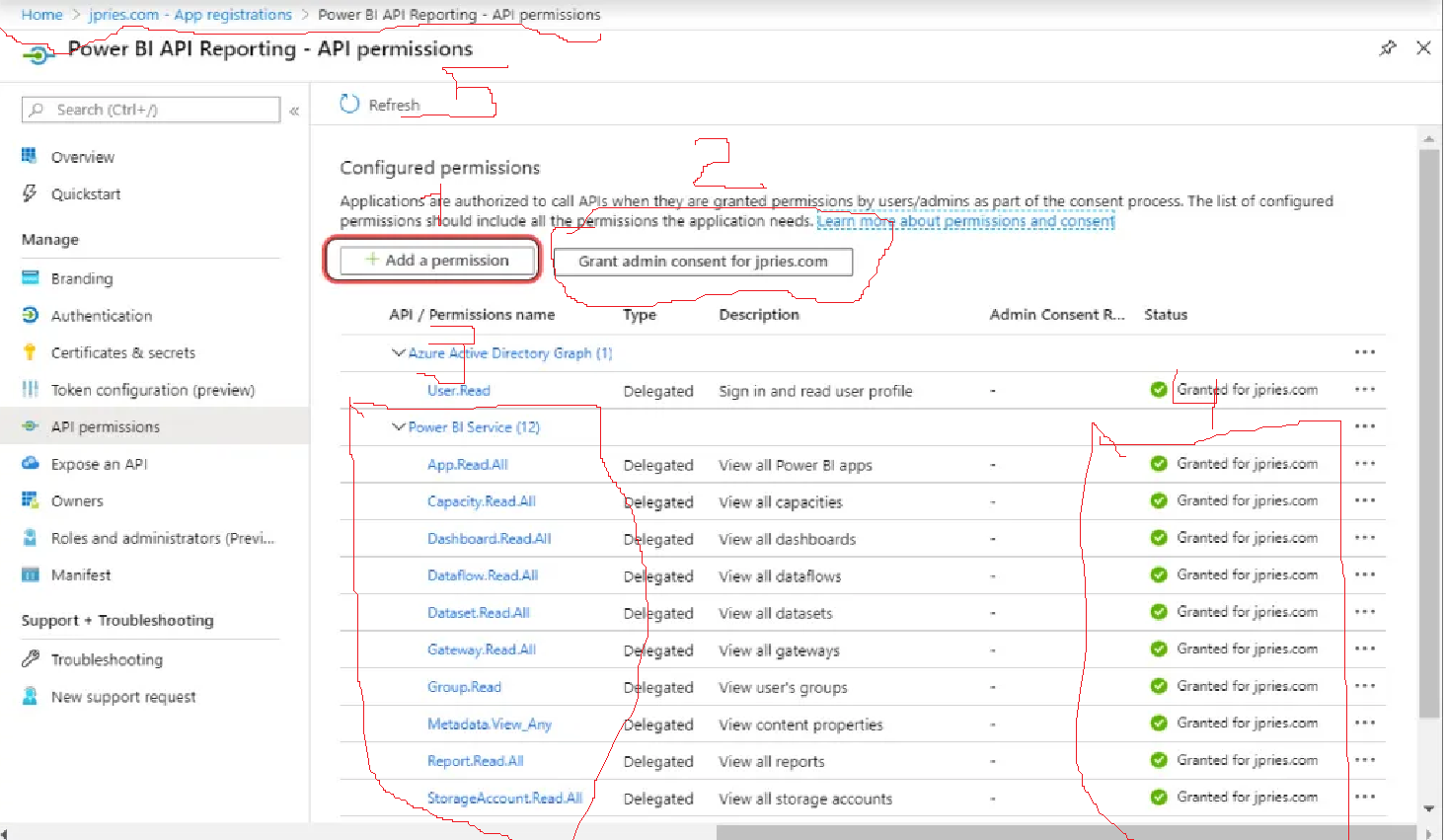
Here is your **Client Secret Key**. Copy it

**Note :**Client secret values cannot be viewed, except for immediately after creation. Be sure to save the secret when created before leaving the page.

**Step 4-Adding missing API permissions**

**Step 4.1**

Click on app registration🡪specific application🡪API permissions



**Step 4.2-** Grant admin consent button

It is needed for acknowledging to admin that we are raising rest api permissions and needed to get an approved

**Step 4.3-** powerbi rest api permissions should comes under powerbi service

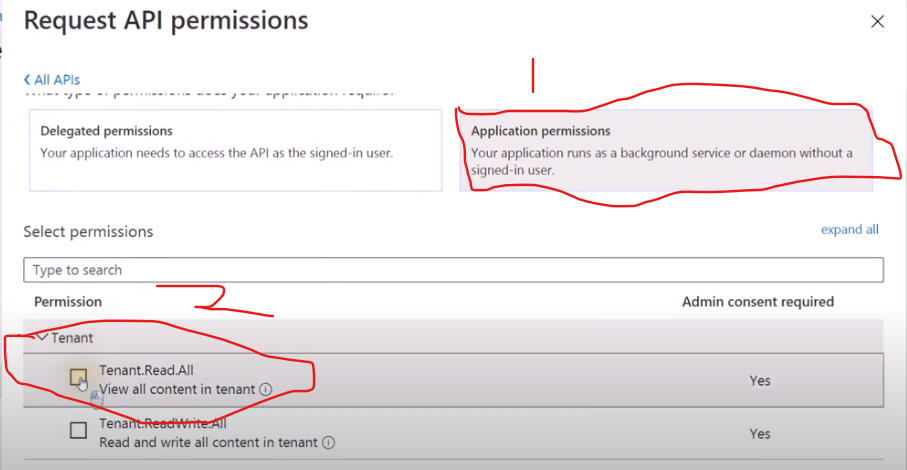
**Step 4.4-** Approval status by amin

**Step 4.5-**Path of API’s option location

**Step 5:Providing High level permission-Tenant.read.all**

**Step 5.1-**

click on step1 button>powerbi service button>application permissions>Request api permissions



**Now application(client id)—Usename**

**Client secret key------ Password**

Username and password both are available

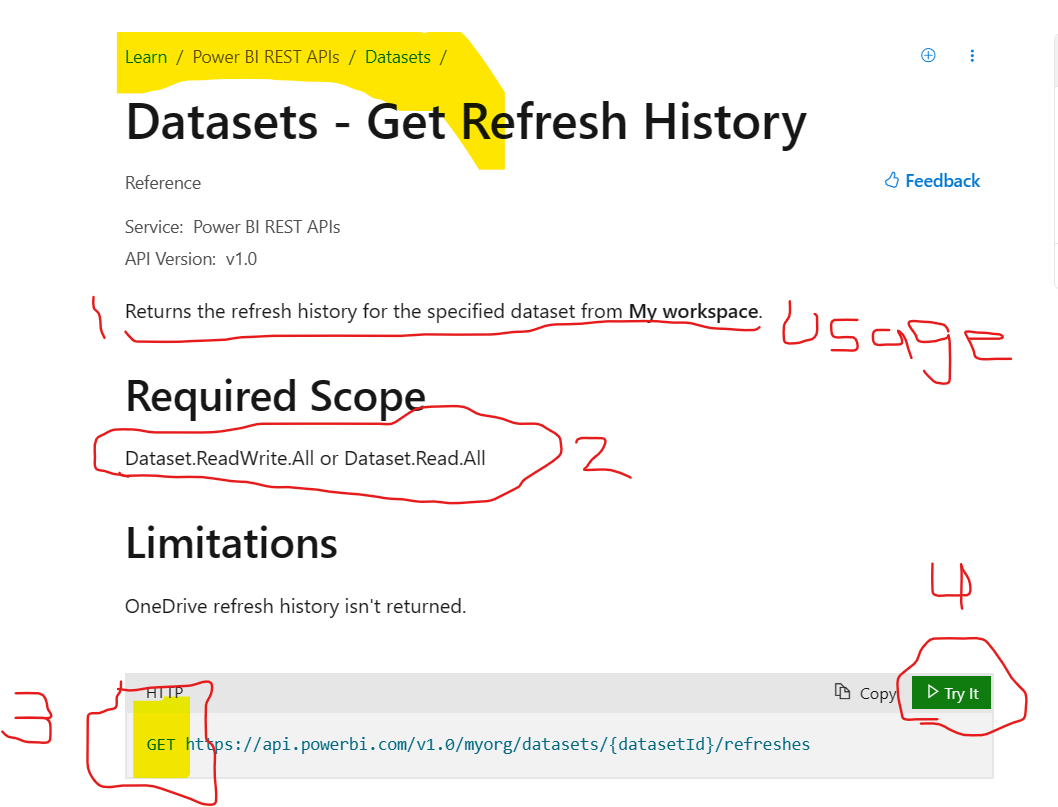
Need to check whether accessible or not and need to gather bearer token

**Step 6:Checking client id and client secretkey permissions**

**Example**----dataset refresh history

**Step 6.1**

API details



**Step 6.1.1**-API Usage details

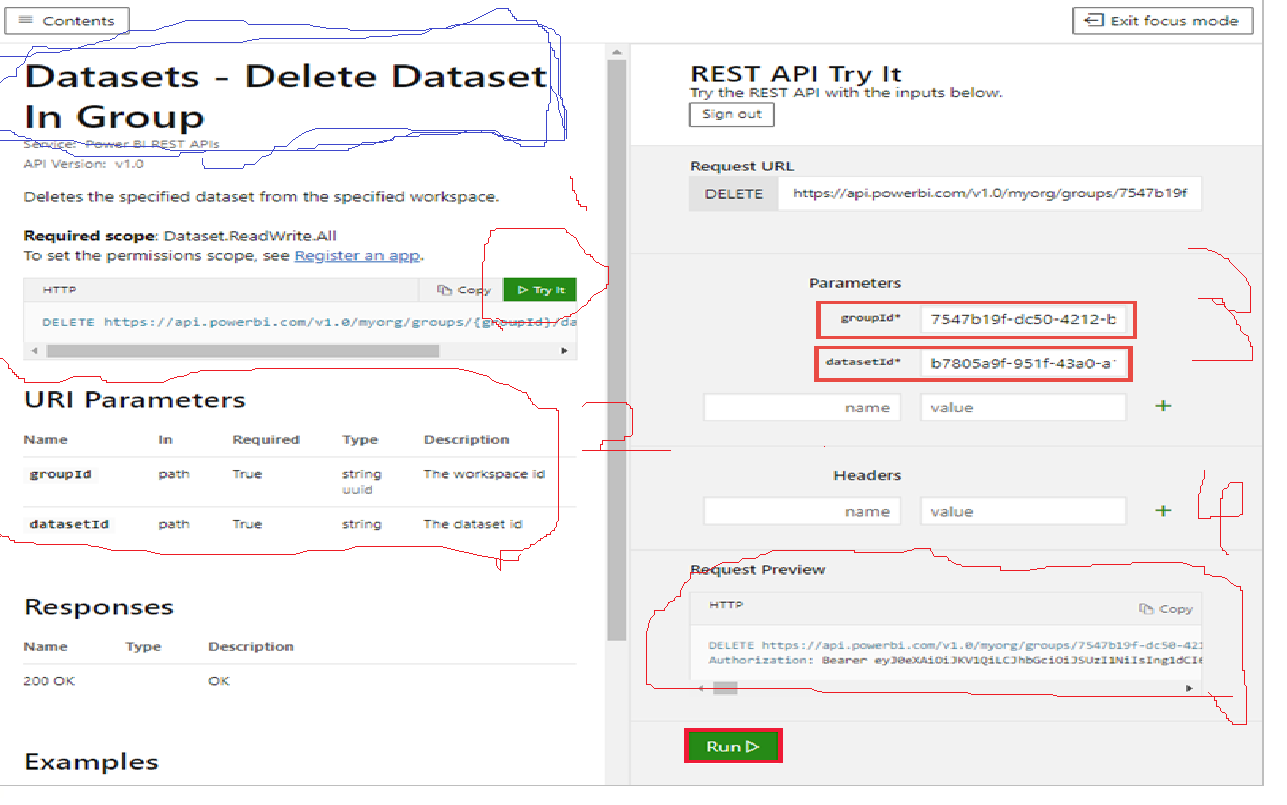
**Step 6.1.2**-permission needed

**Step 6.1.3**-Get-🡪Read & post🡪**Write**

**Step 6.1.4**—click it and move to testing page

**Step 6.2**

**-Page appear after clicking on “get it” option**



**Step 6.2.1-**-

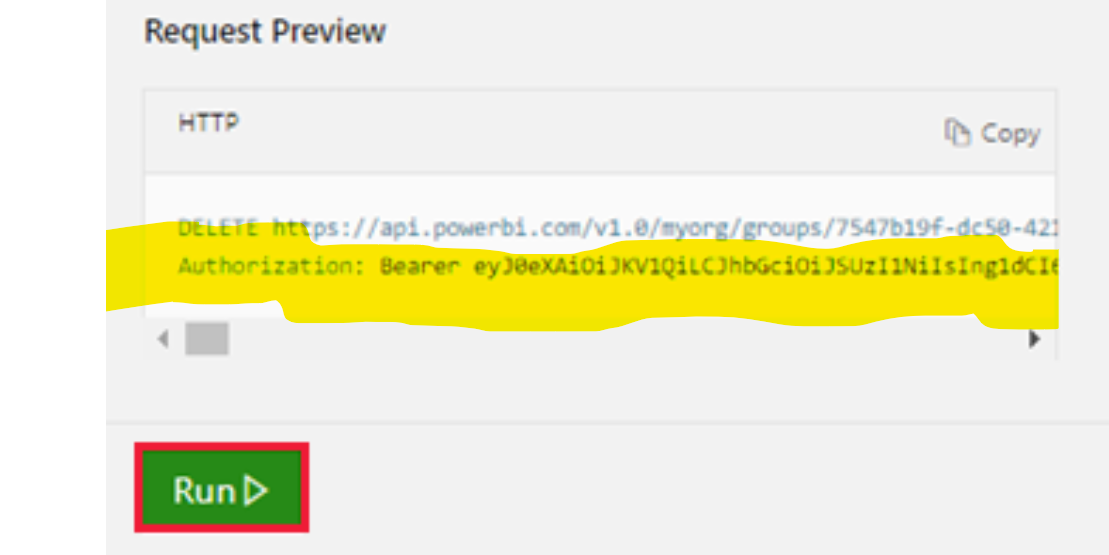
Click on try it button-besides page will come

**Note-**Login using service principle credentials instead of personal crdentials

**Step 6.2.2** & **Step 6.2.3** those are input values or parameters and should be same

**Step 6.3**

Bearer token will be start after **Authorization:** below screenshot

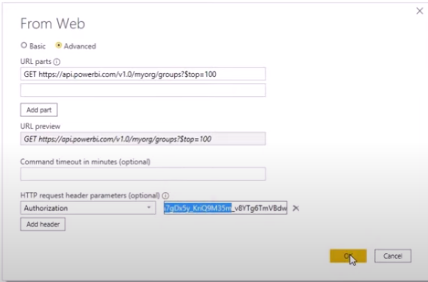


**Step 7:**

**Accessing data by using credentials**

**Step 7.1:**

Powerbi desktop-🡪get data-🡪Web option



URL Parts & URL preview both are same

GET <https://api.powerbi.com/v1.0/myorg/group?$top=40>

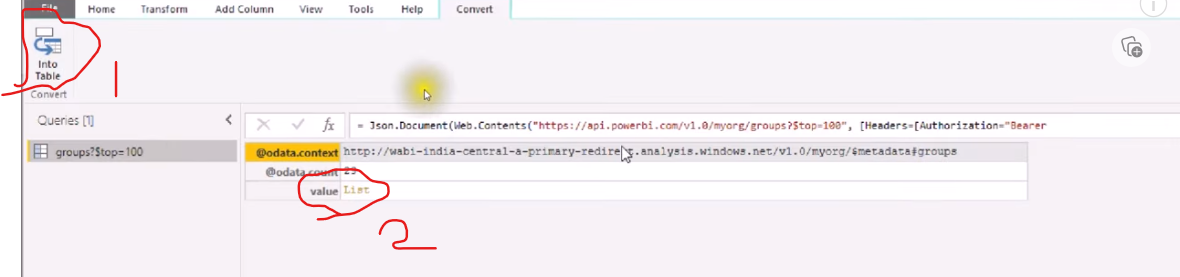
HTTP request: Authorization

=copy bearer token=🡺Bearer \*\*\*\*\*\*\*\*\*\*\*

Click on **OK**

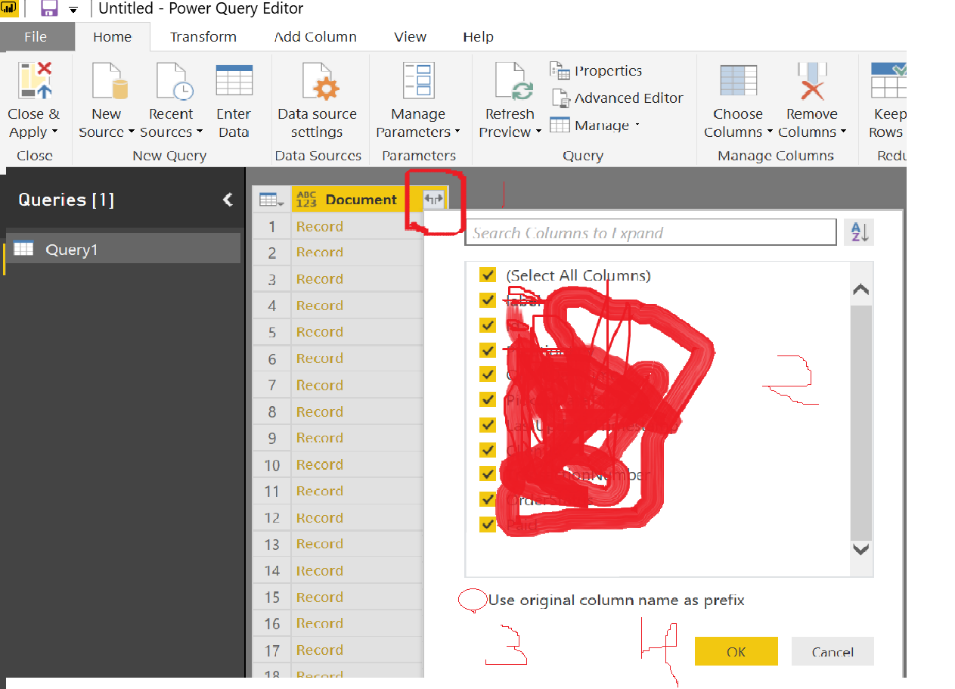
**Step 7.2:**

After clicking **OK** it will be move to below screenshot and click on **List**



**Step 7.3:**

Click on to table>popup page will come>ok



**Step 7.3.1**-expansion

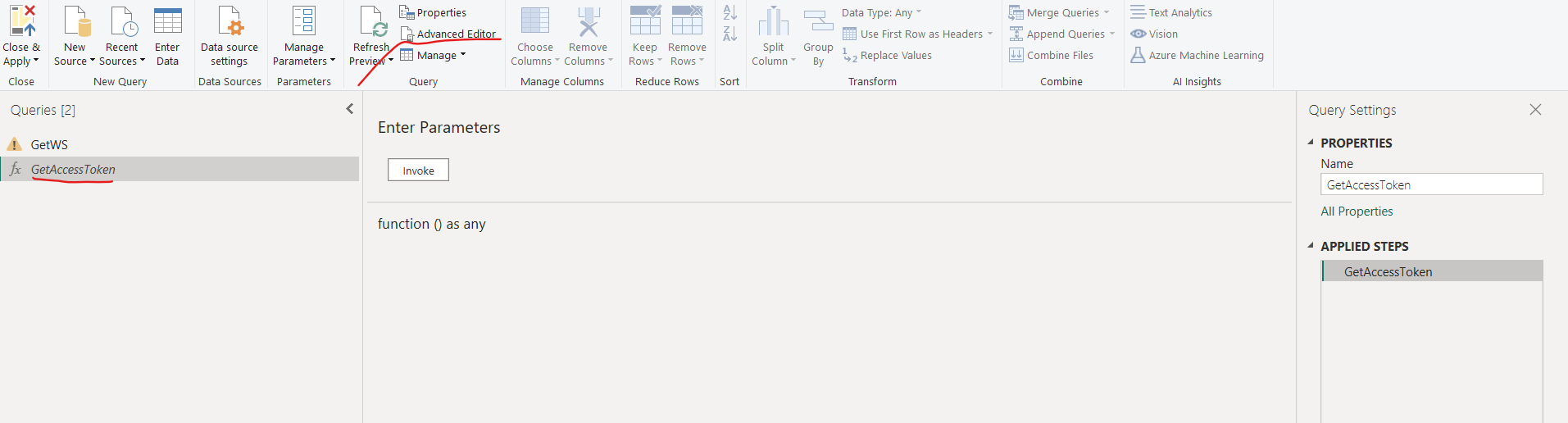
**Step 7.3.2**-select all

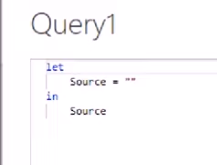
**Step 7.3.3**-Don’t select

**Step 7.3.4**-ok

**Step 7.3.5-**Give proper name for query in next page

**Step 7.4:**

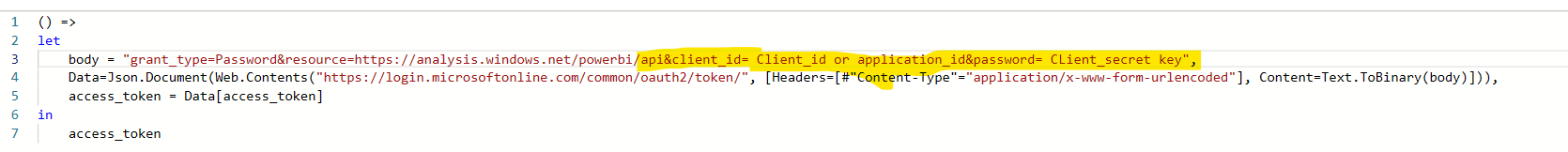
****



Replace above screenshot scode with below code

**Step 7.4.1:**

Copy and paste code & relace red color place like client\_id &client secret key with real details



======================CODE===========================================

() =>

let

body = "grant\_type=Password&resource=https://analysis.windows.net/powerbi/api &client\_id= Client\_id or application\_id&password= CLient\_secret key",

Data=Json.Document(Web.Contents("https://login.microsoftonline.com/common/oauth2/token/", [Headers=[#"Content-Type"="application/x-www-form-urlencoded"], Content=Text.ToBinary(body)])),

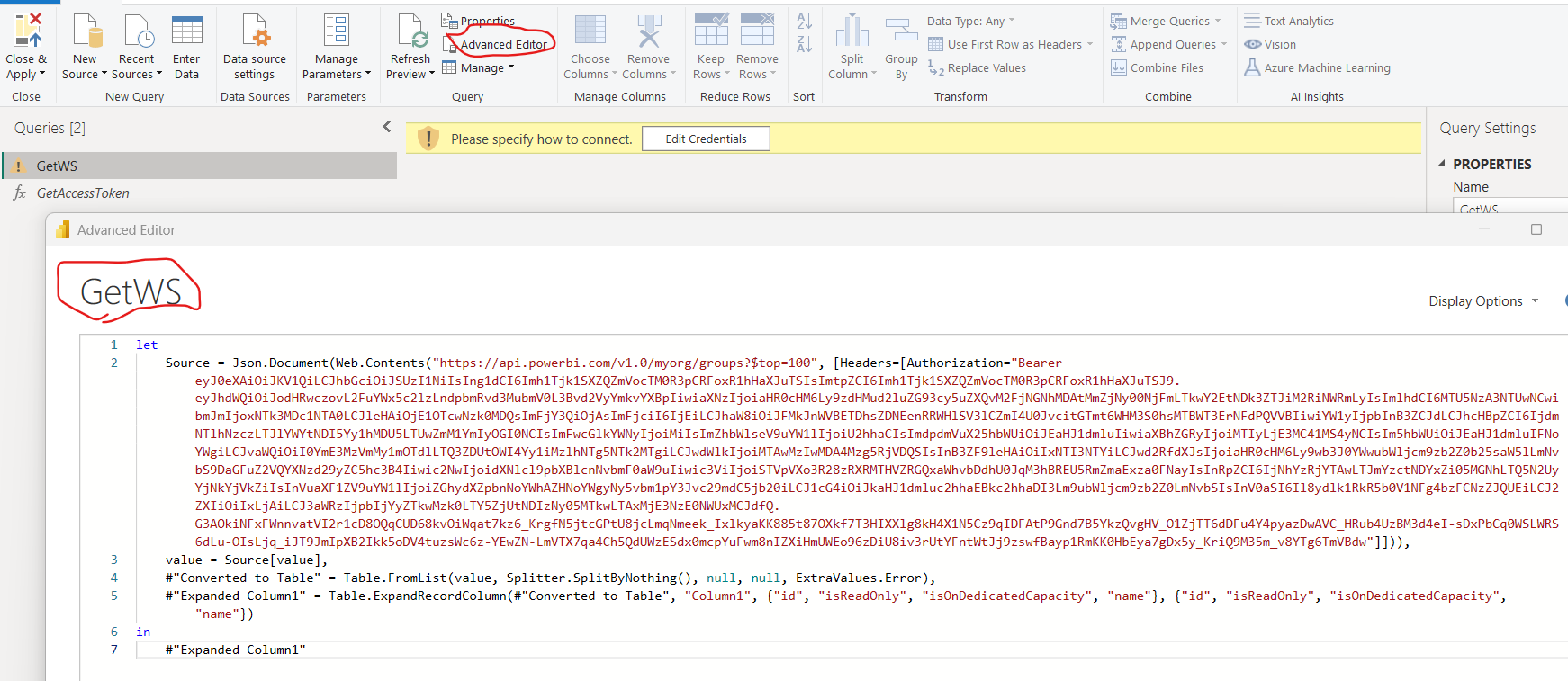
access\_token = Data[access\_token]

in

access\_token

**Step 7.4.2:**

Then new source-🡪blank query---🡪new query will come—advanced editor



GetWS-Advanced editor-code

Remove above visible code and paste below code in advance editor page

=================================CODE=====================================

let

Source = Json.Document(Web.Contents("https://api.powerbi.com/v1.0/myorg/groups?$top=40", [Headers=[Authorization="Bearer "&GetAccessToken()]])),

value = Source[value],

#"Converted to Table" = Table.FromList(value, Splitter.SplitByNothing(), null, null, ExtraValues.Error),

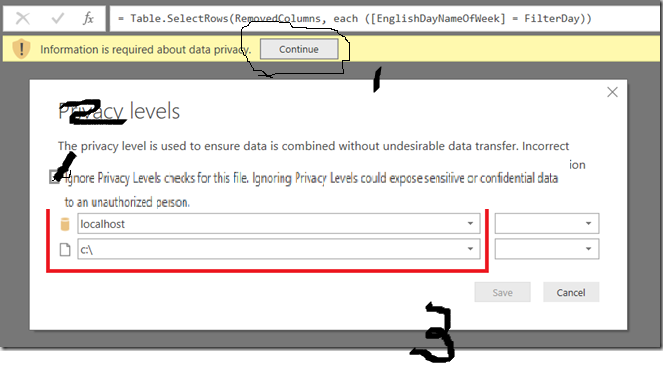
#"Expanded Column1" = Table.ExpandRecordColumn(#"Converted to Table", "Column1", {"id", "isReadOnly", "isOnDedicatedCapacity", "name"}, {"id", "isReadOnly", "isOnDedicatedCapacity", "name"})

in

#"Expanded Column1"

**Step 7.4.3:**

**Looking into privacy details**



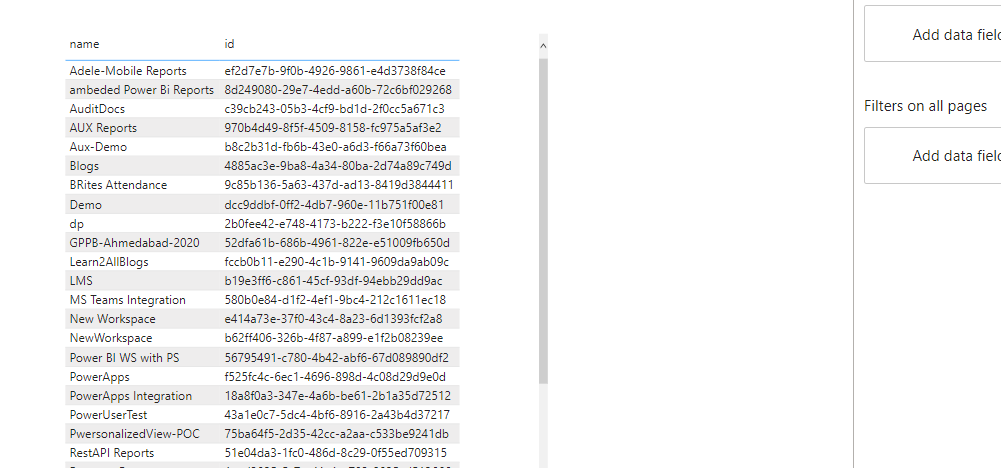
**Step 7.4.3.1:**-click on continue

**Step 7.4.3.2:**-make a tick mark by saying ignore

**Step 7.4.3.3:**-save

**Step 7.5:**

click on close and apply button,then start developing your visuals as per requirement



**Usage-**

All powerbi rest apis can be used in a single report and able to retrive all details related to workspaces,reports,Datasets and its refresh details along with gateway details

**Issues-**

These **API’s** are not accessible at a gateway level

**Overcome-**

Need to refresh report in powerbi desktop daily and published to powerbi.com @at a time of sharing report to customers