**Swordfish Developer Documentation**

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Overview of Power Bi Dashboard ……………………………………………………………………….. 1

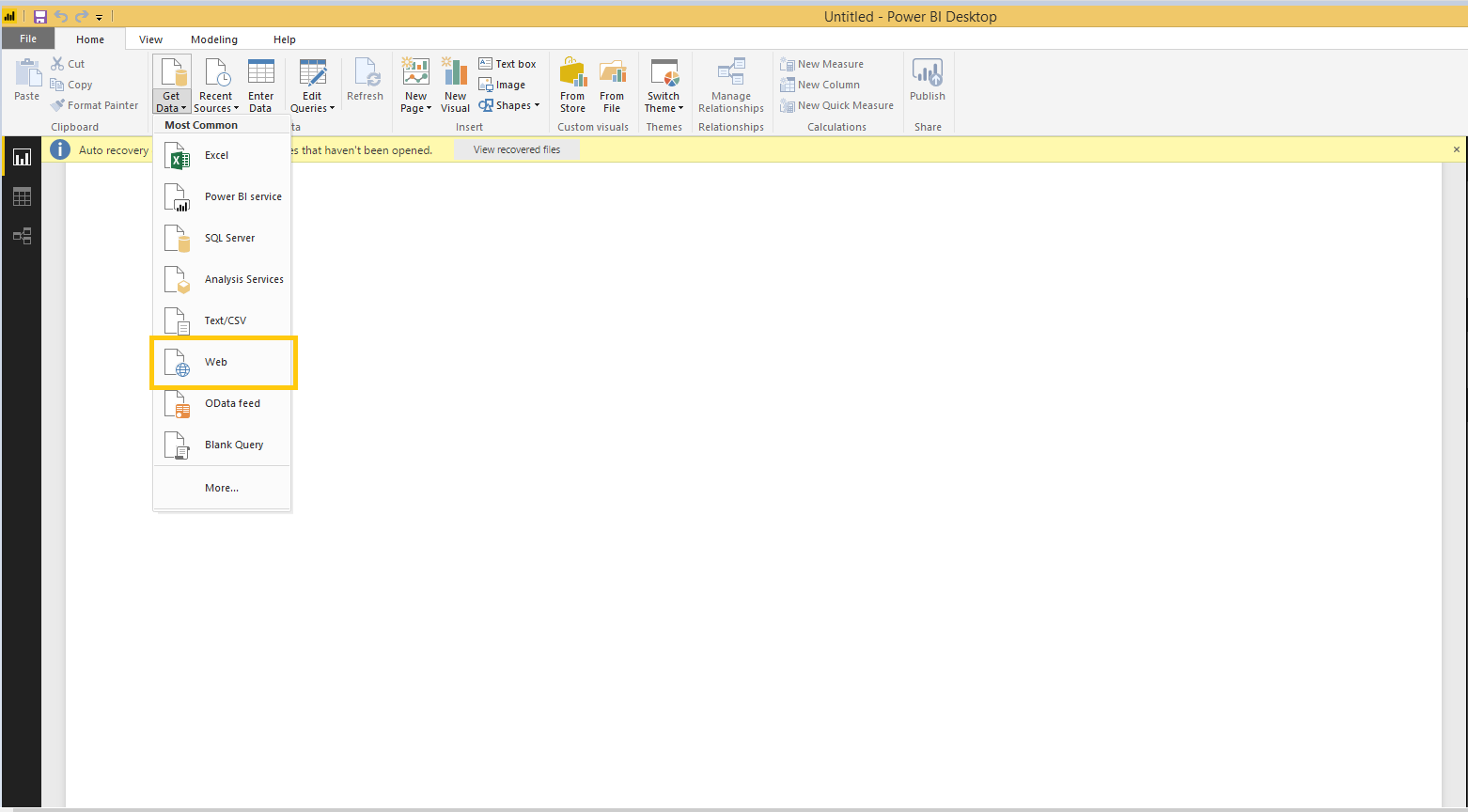
Dashboard Creation of Power Bi …………………………………………………………………………. 2

Overview:-

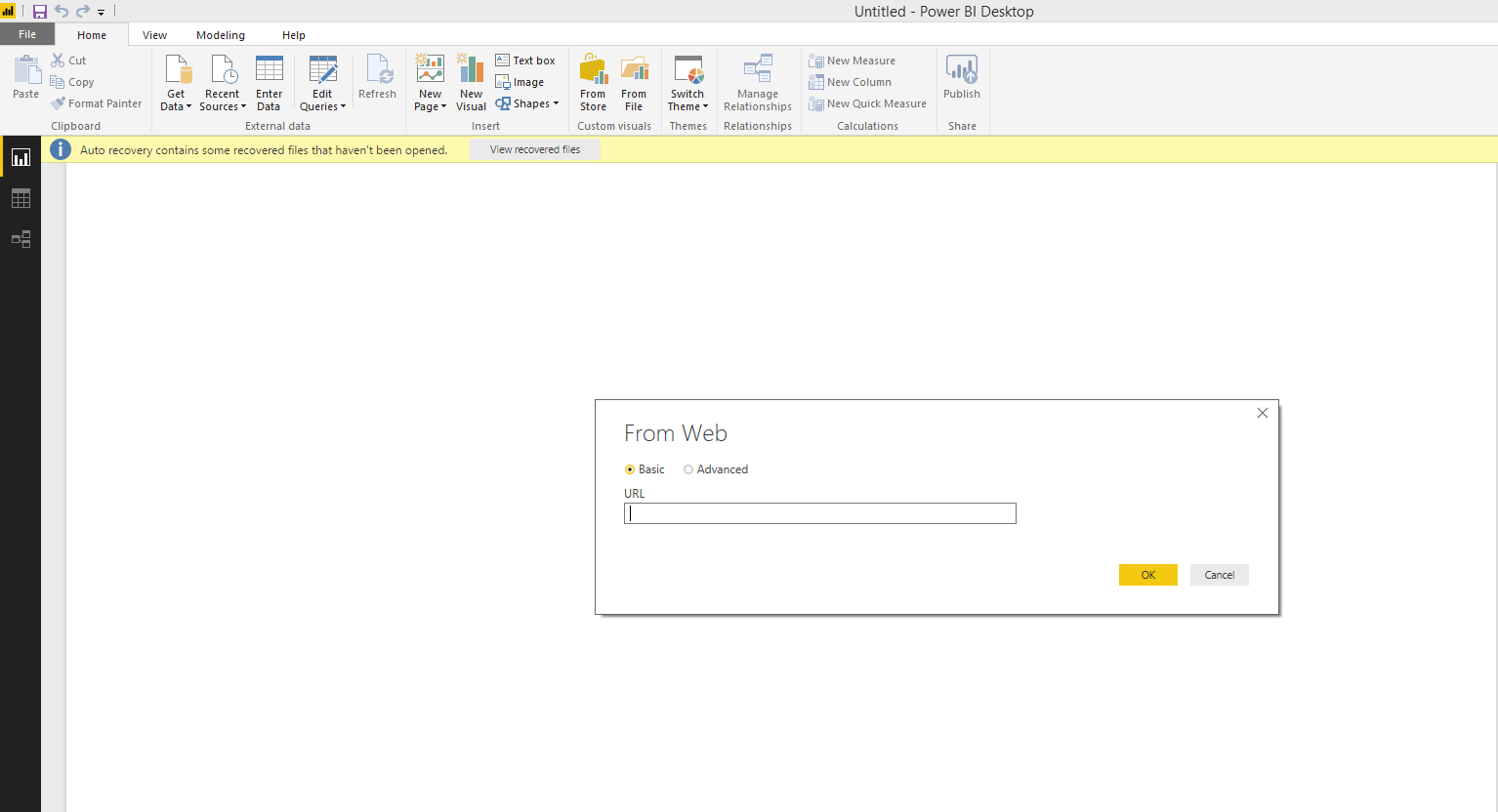
A Power BI dashboard is a single page, often called a canvas, that uses visualizations to tell a story. Because it is limited to one page, a well-designed dashboard contains only the most-important elements of that story.

Install the downloaded powerbi.msi in your own desktop then our source will be JSON web service That’s why developer use web as a data source as shown in the below figure

Step1 :- Open Power-BI Desktop and click on “Get Data” and click on web button



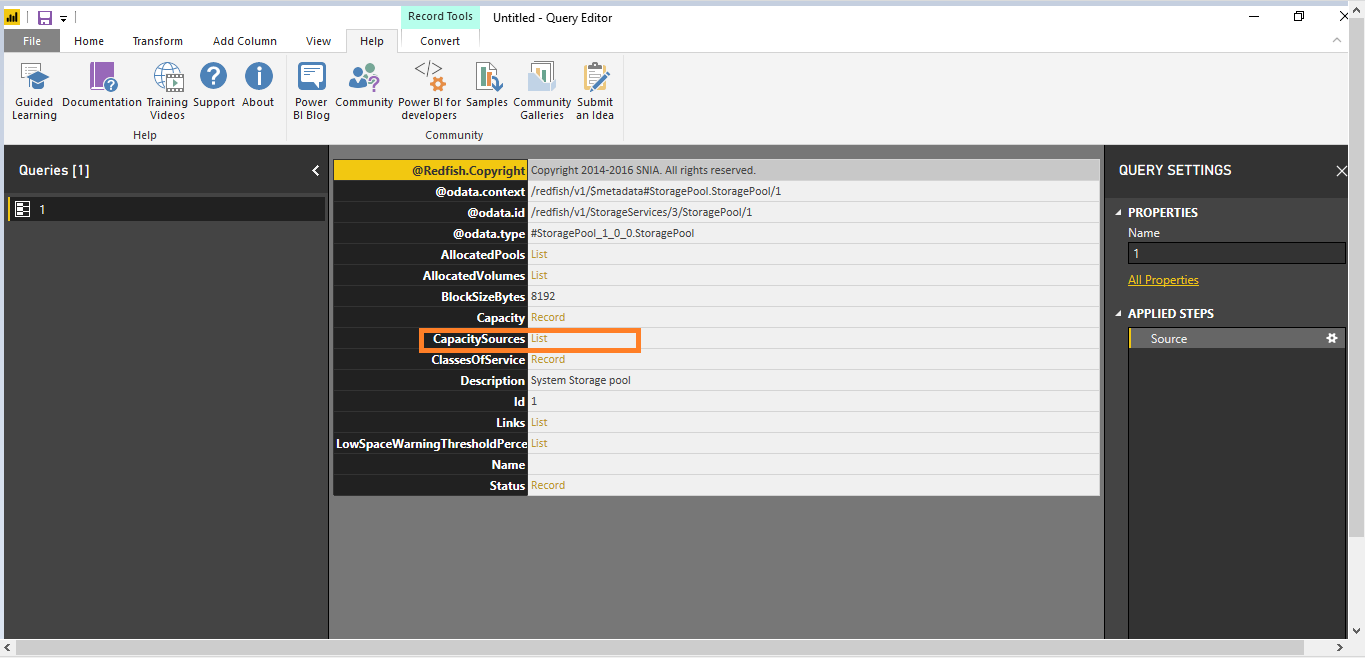
Step1.1:- After clicking on web button it will display the Basic and advanced URL path tab as shown in the below figure



In the URL-tab place will give the URL as a data source by giving below example

Eg:- [http://localhost:5000/redfish/v1/StorageServices/1/StoragePools /sp1](http://localhost:5000/redfish/v1/StorageServices/1/StoragePools%20/sp1)

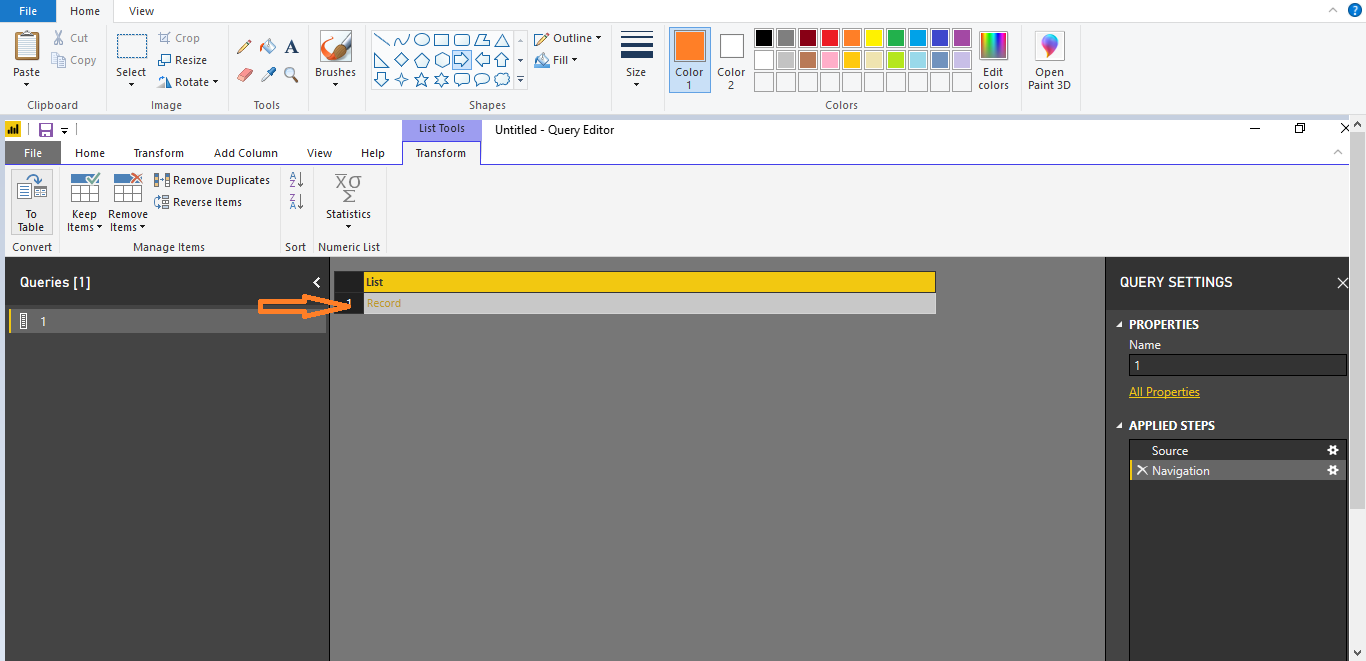
Step1.2:- After placing the URL in given tab it will automatically go to query editor as shown in the below figure



When click the capacity sources of list button it will open the list of records as shown in the below figure

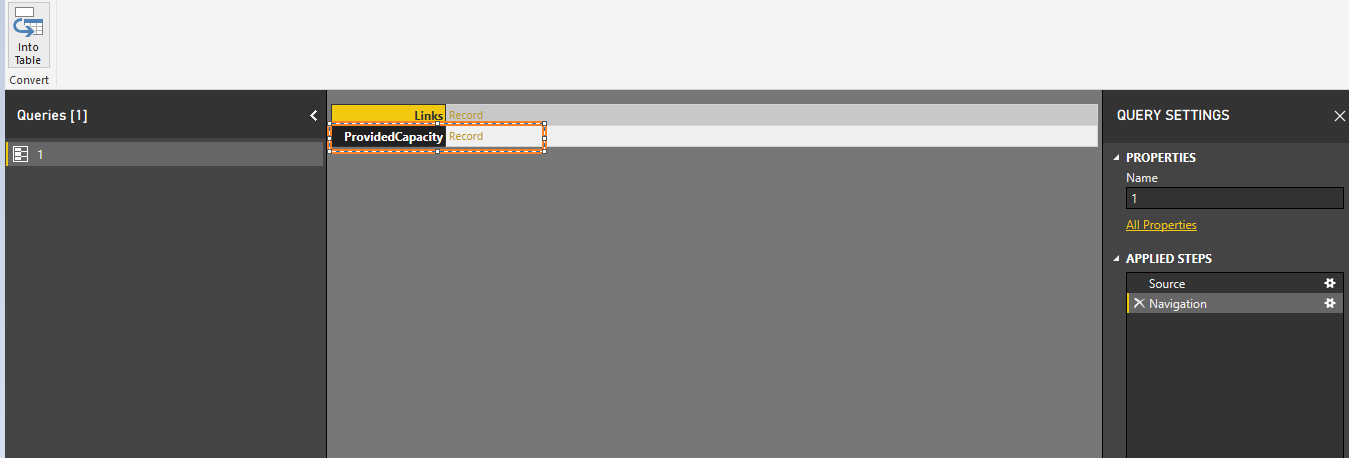
Step 1.3:-

Open the list of records, click on the Record button as shown in the above figure. It will show nested service .

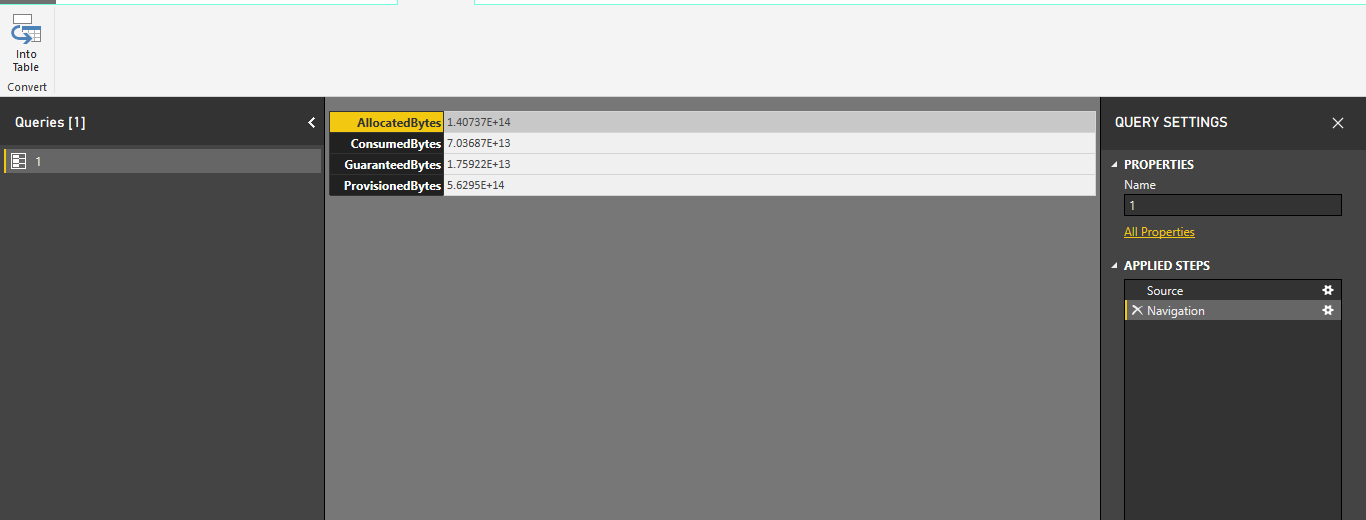


Step 1.4:-

After click on provided capacity records it will show the all capacities of provided capacity array as shown in the below figure

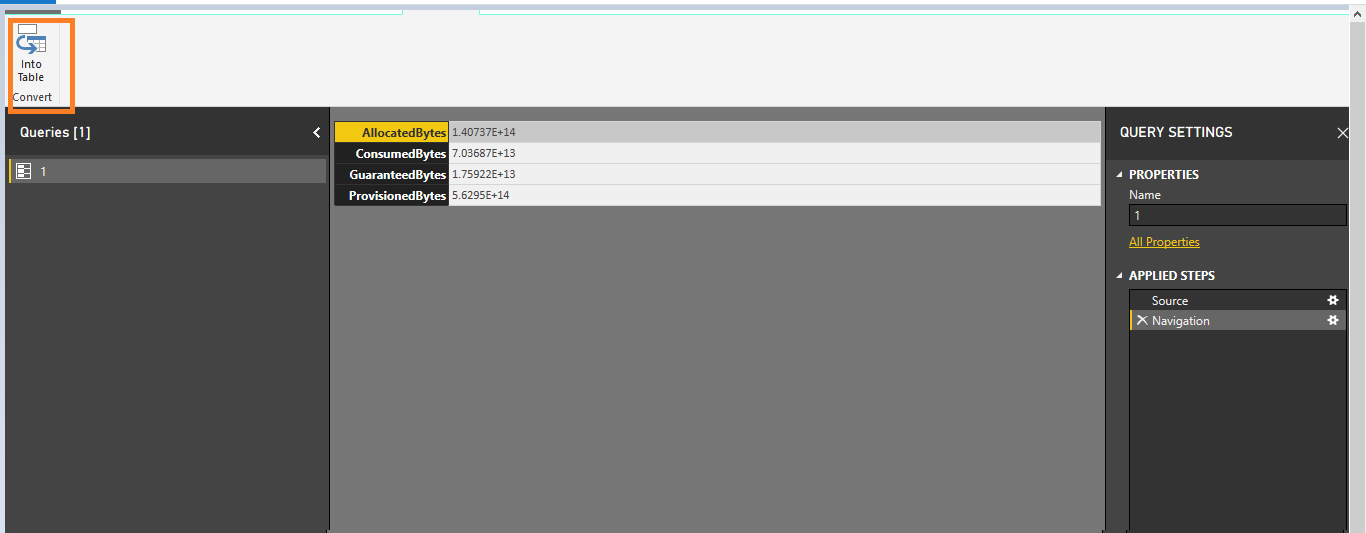


Step 1.5:-



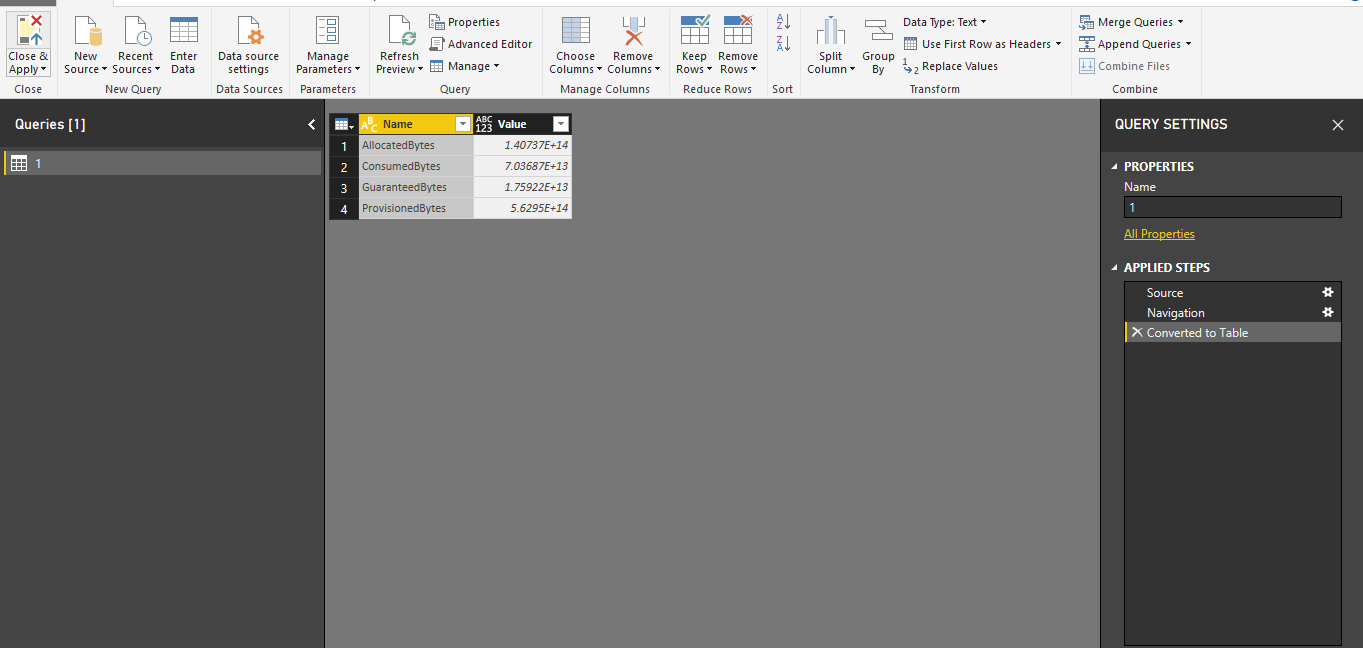
Step 1.6:-

After showing the all capcities values converted those into table by clicking ”intotable”option placed in the left side button as shown in the below diagram



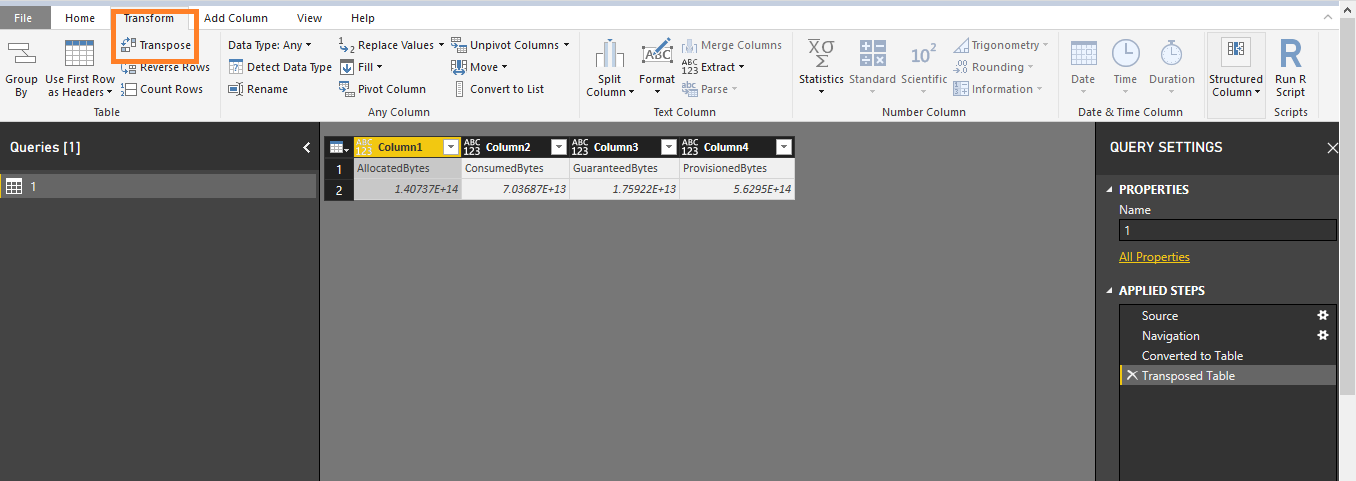
Step 1.7:-

The values are converted into table format as shown in the below figure



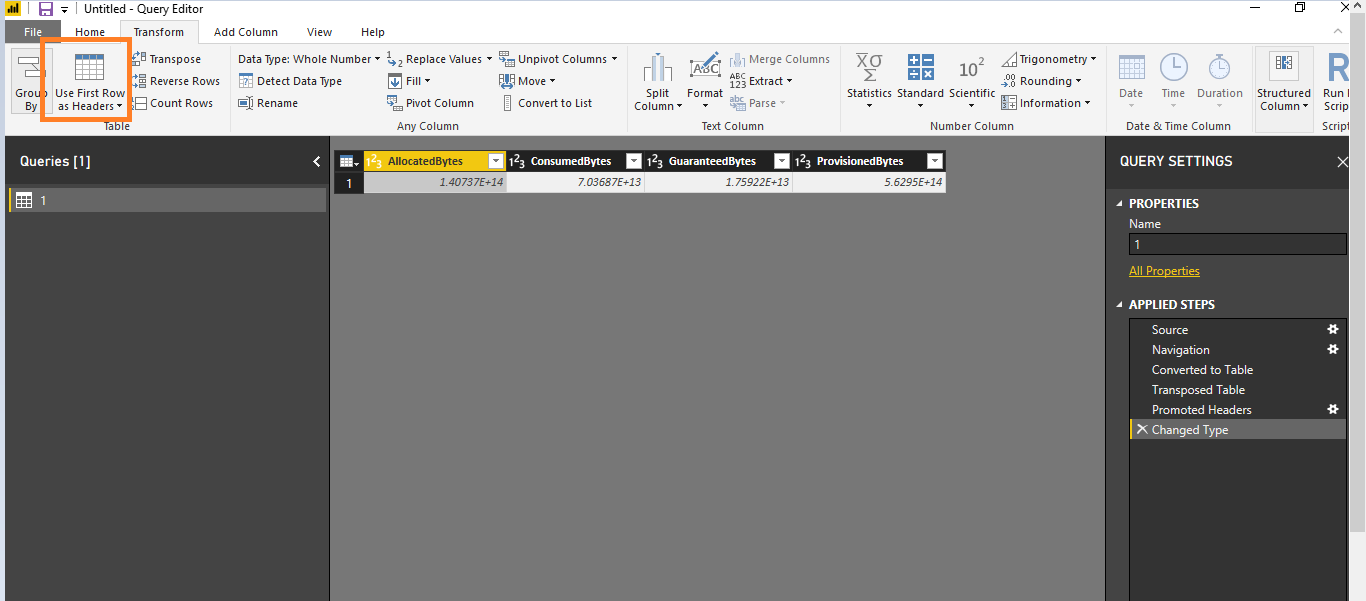
Step 1.8:-

The next step is go to the transform button in the Transform bar click on Transpose button as shown in the below figure



Step 1.9:-

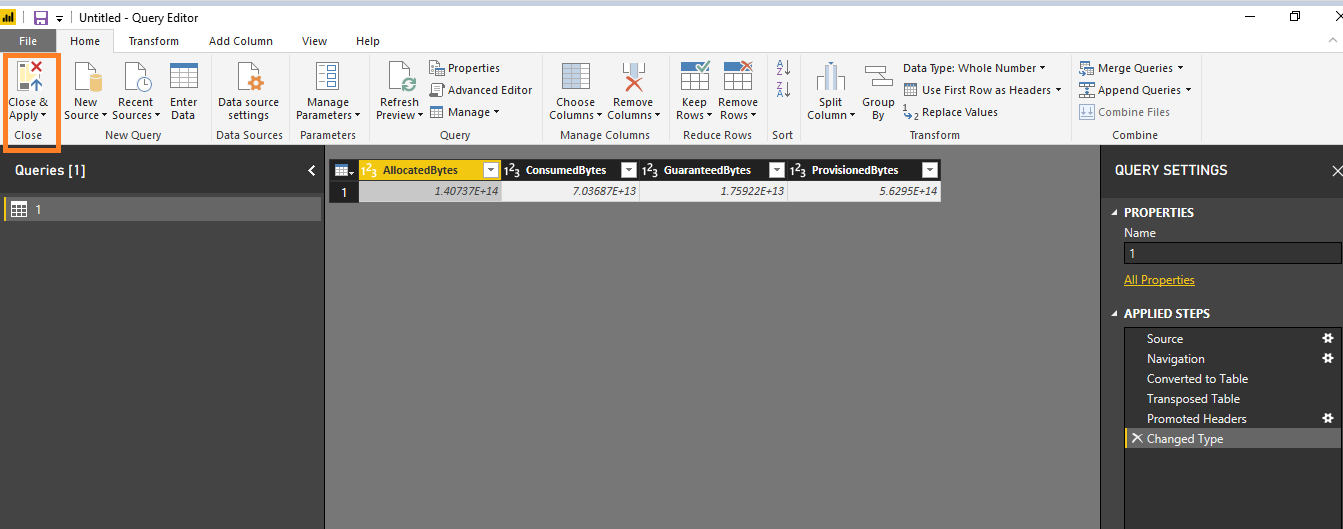
Go to Transpose Bar and click on use first row as header button as shown in the below figure.



After click on use first row button the output will be as shown in the above figure and remove the the guarantee bytes and provisoned bytes if they are not necessary.

Step 1.10:-

The next step is remove the guaranteebytes and provisoned bytes go to home button and “ click&Apply “button as shown in the below figure



After completing all above steps take another URL as mentioned below

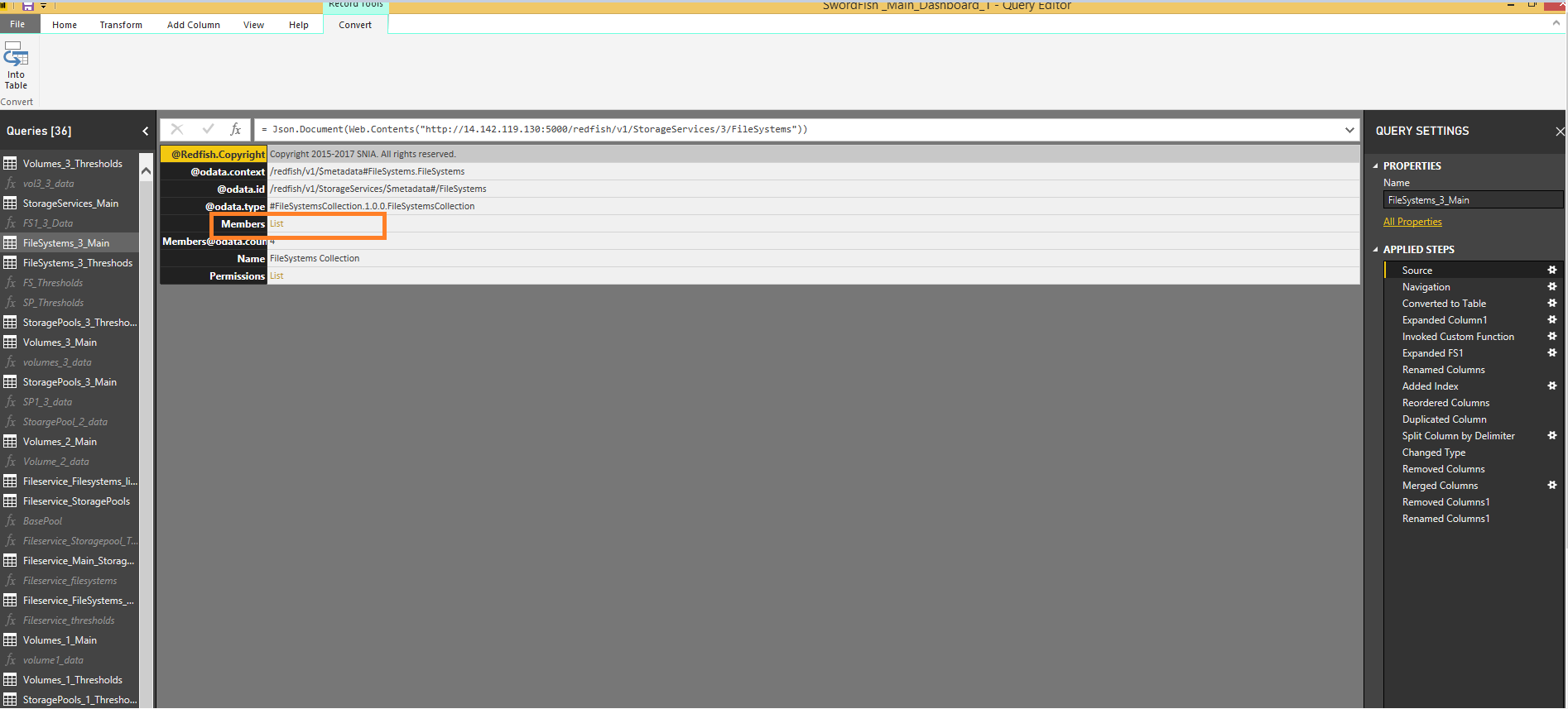
**Eg:-** <http://localhost:5000/redfish/v1/StorageServices/3/StoragePools>

Step2:-By Taking another URL

Go to “Getdata” and click on web as a datasource and give the above URL.

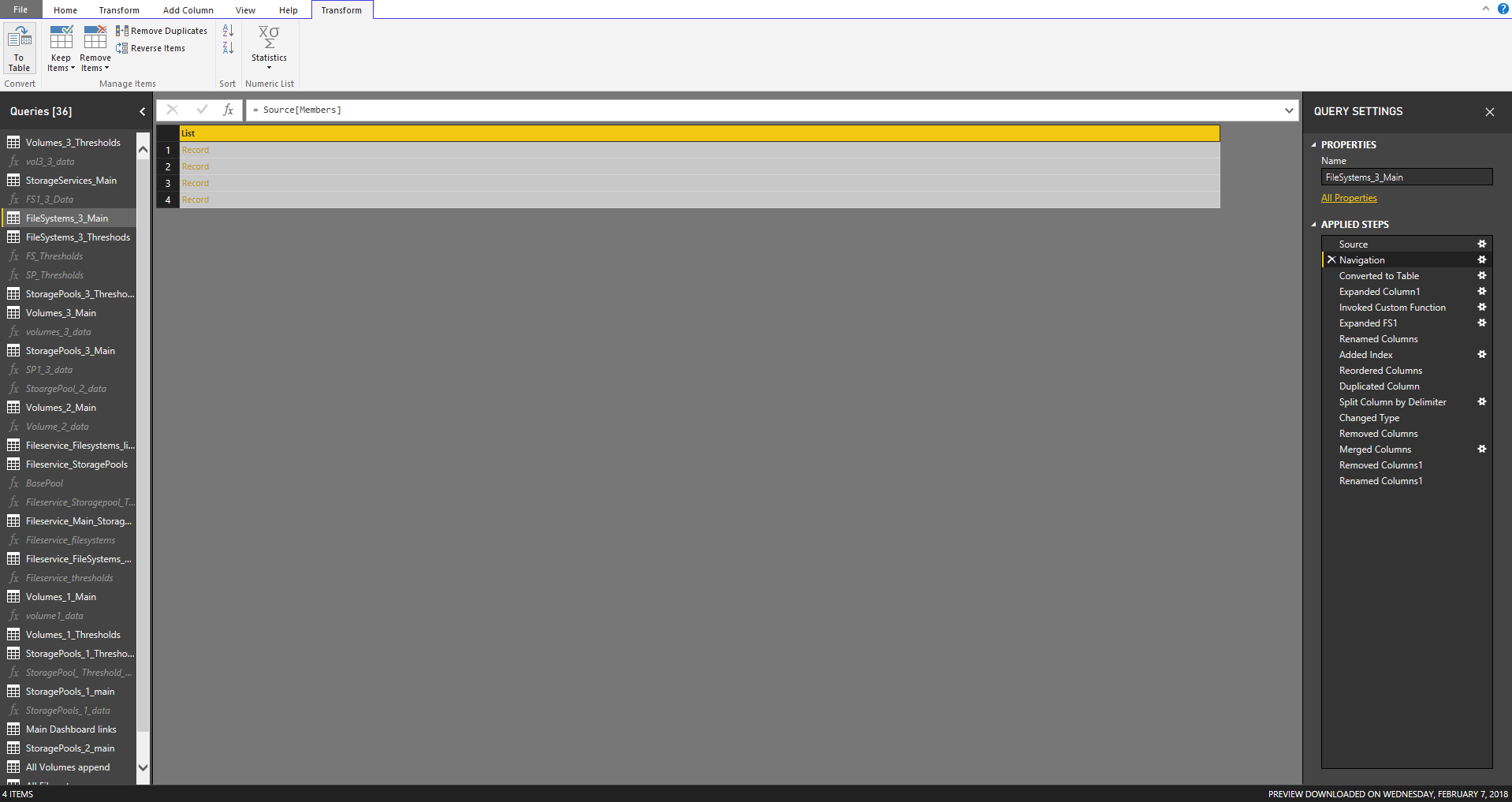
Give the above URL into URL tab and it will open the Editor window as shown in the below figure and follow accordingly

Step2.1:-After open the editor window will click on the Members row as shown in the below figure



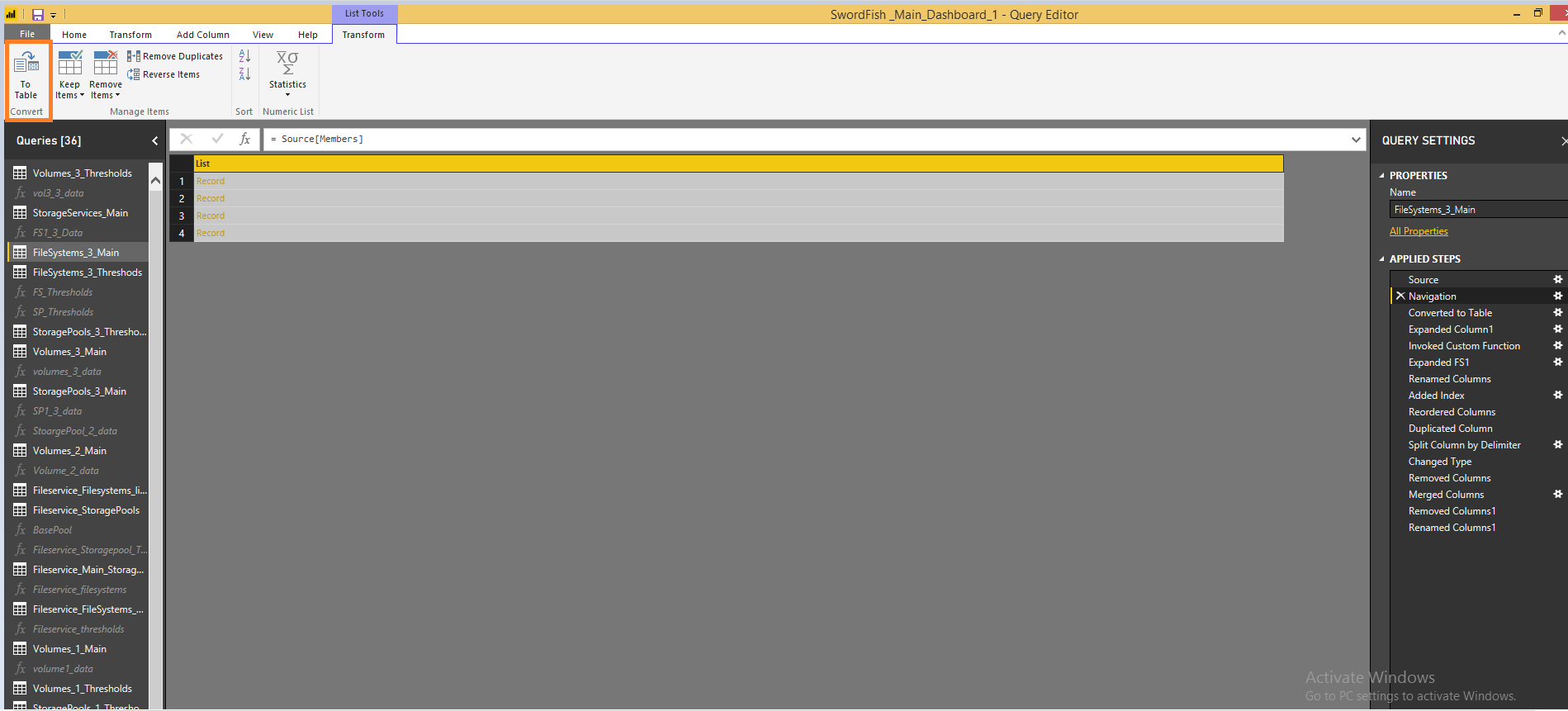
Step 2.2:-

Members will navigate into records list as shown in the below figure

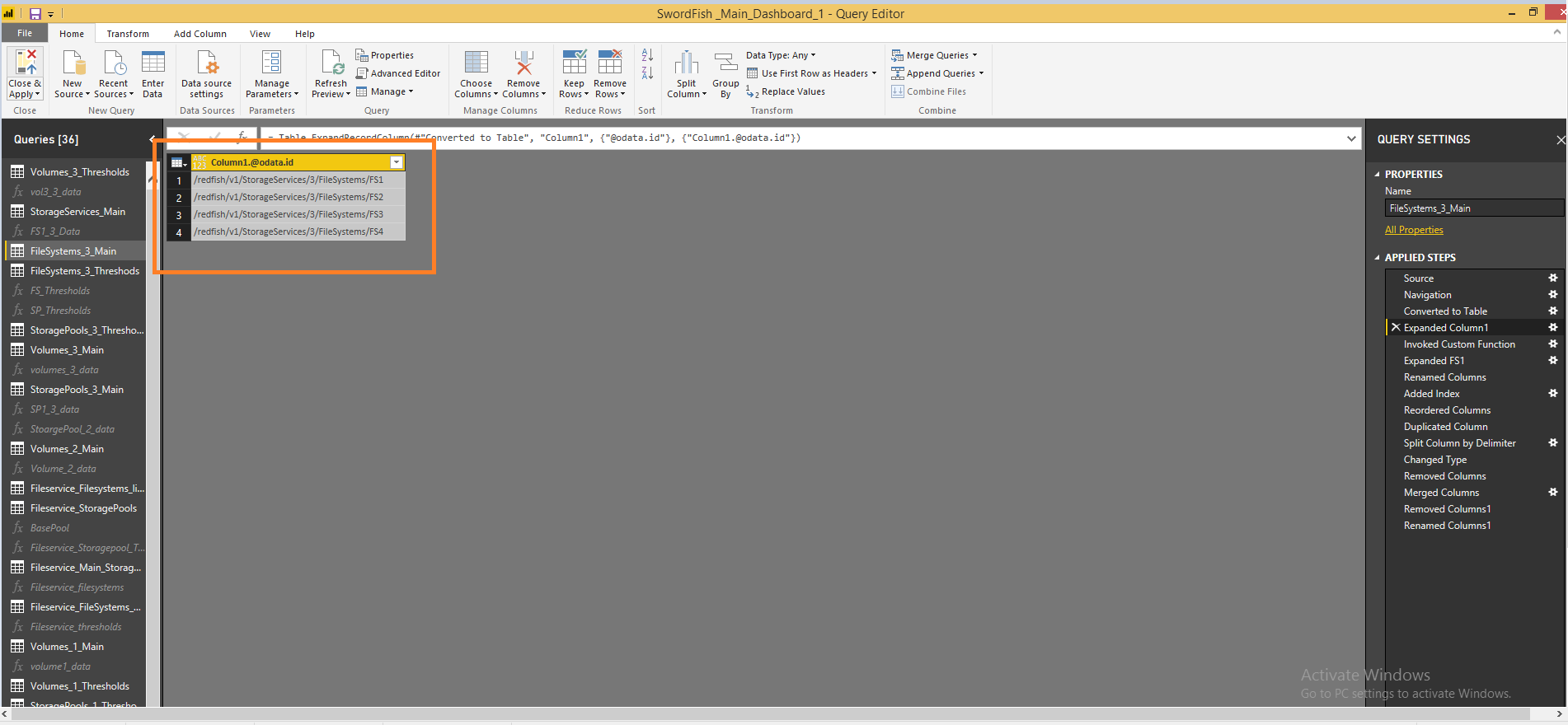


Step2.3 :-

The above opened list of records will be converted into table as shown in the below figure



Step 2.4:-

Below is the all of the expanded URL’s of Sub- Collections like ( StoragePools, Volumes and Filessystems)

Once Expansion complete ,will invoke the custom function .

**Custom Function** is a query that run by other queries. The main benefit of having a query to run by other queries is that you can repeat a number of steps on the same data structure.

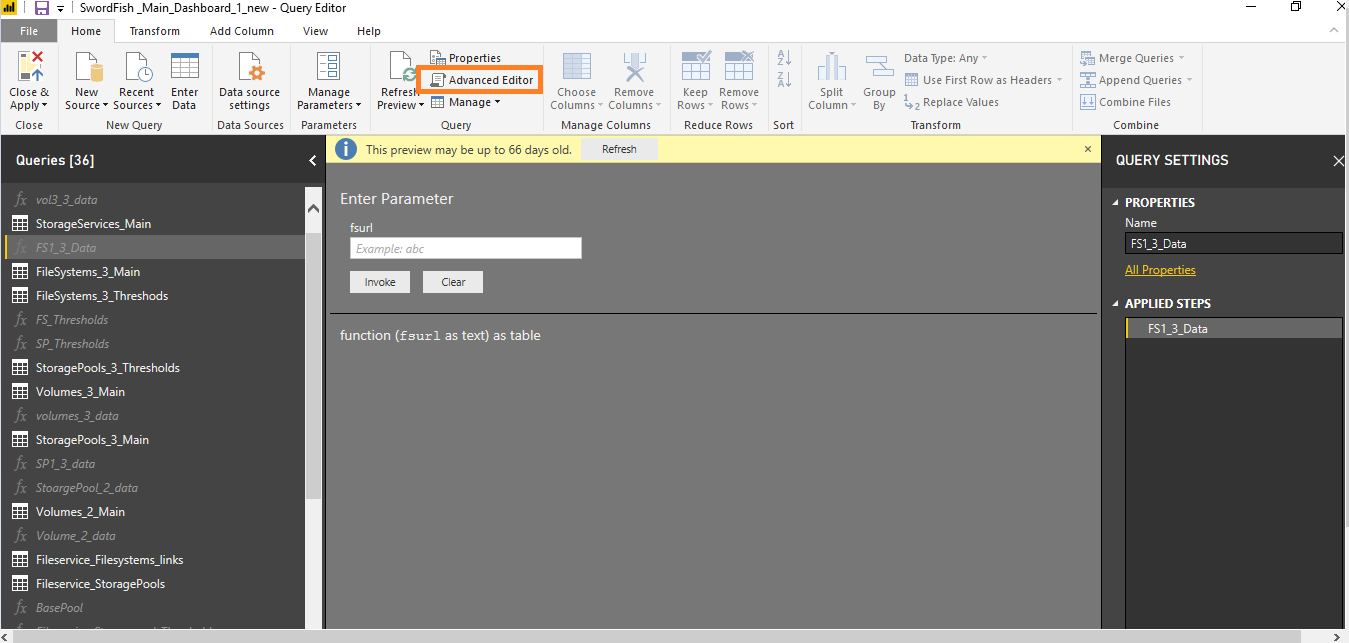
Before we can invoke the custom function will take the one of the (Sub-URL )

in Storage Pools

Eg:- <http://localhost:5000/redfish/v1/StorageServices/3/StoragePools/Sp1>

Step 2.5:-

By using above URL get the Consumed bytes and Allocated bytes by follow Step1 to Step10.1.

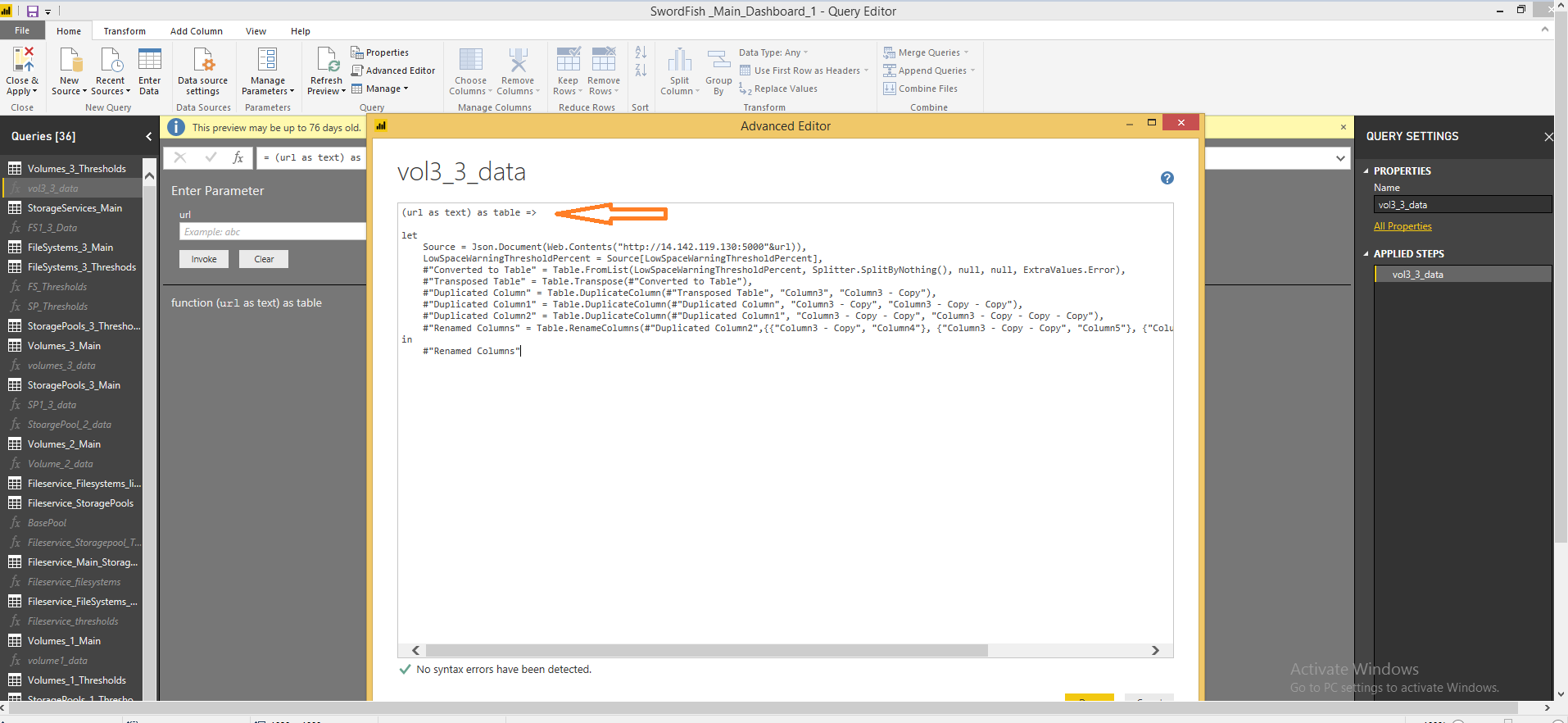


Step 2.6:-

After follow above steps go to advanced editor button of following URL

<http://localhost:5000/redfish/v1/StorageServices/3/StoragePools/Sp1>

And write the query as shown in the below figure

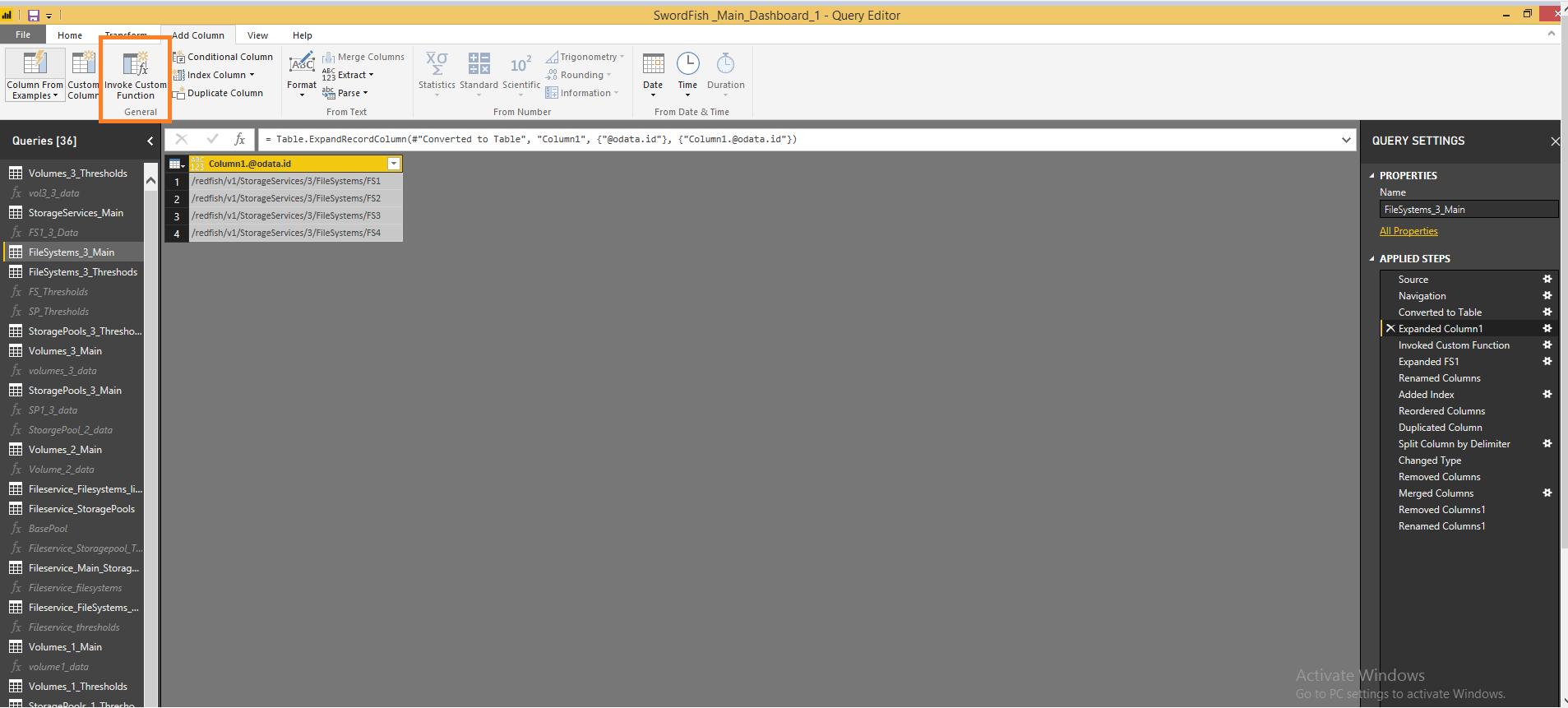


After opening advanced editor window write below query

“----- (url as text) as table =>”

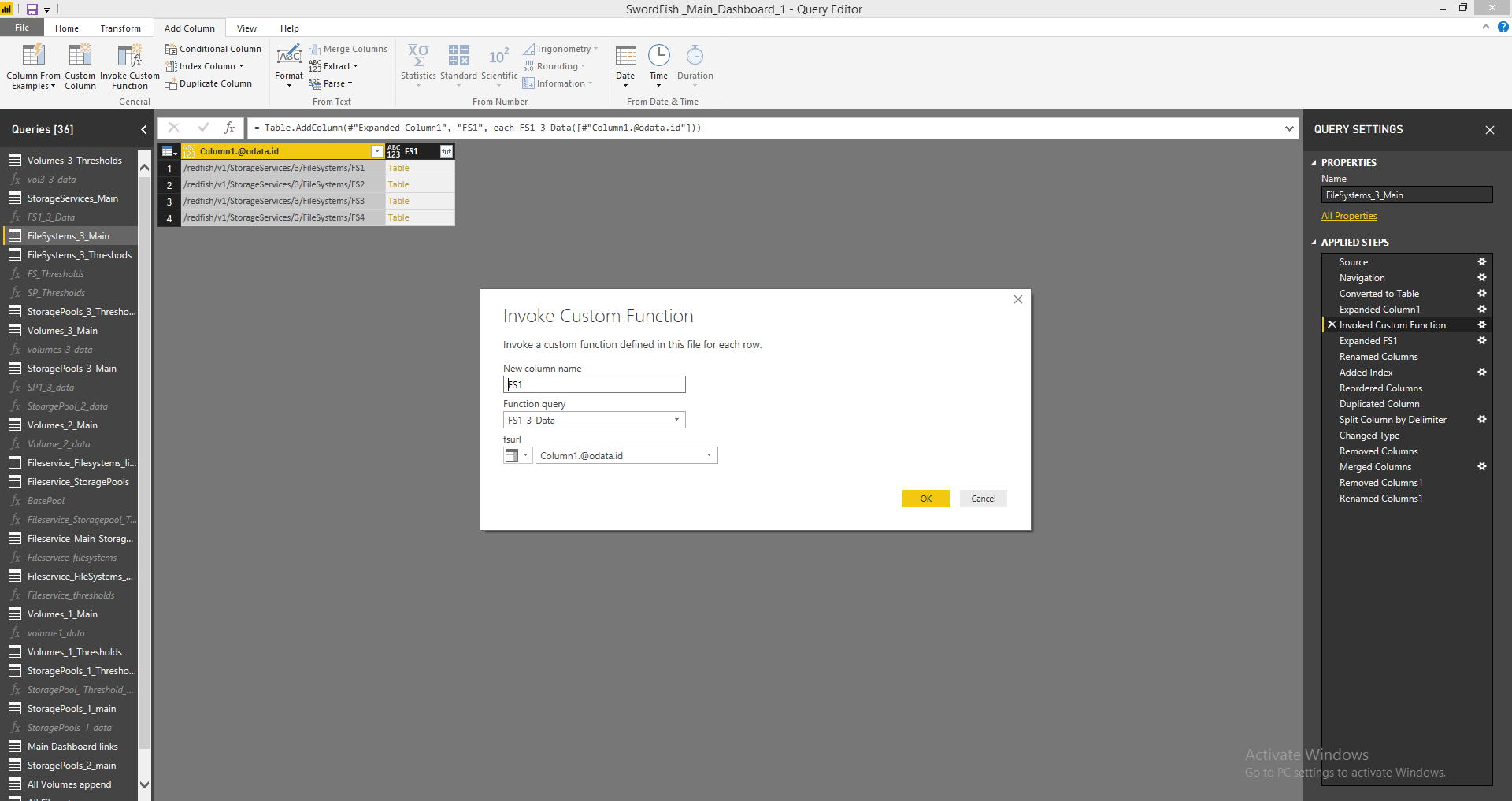
And Go to Main URL and click on invoke custom function icon as shown in the below figure

Step 2.7:-



Now invoke custom function the page will come as shown in the below figure

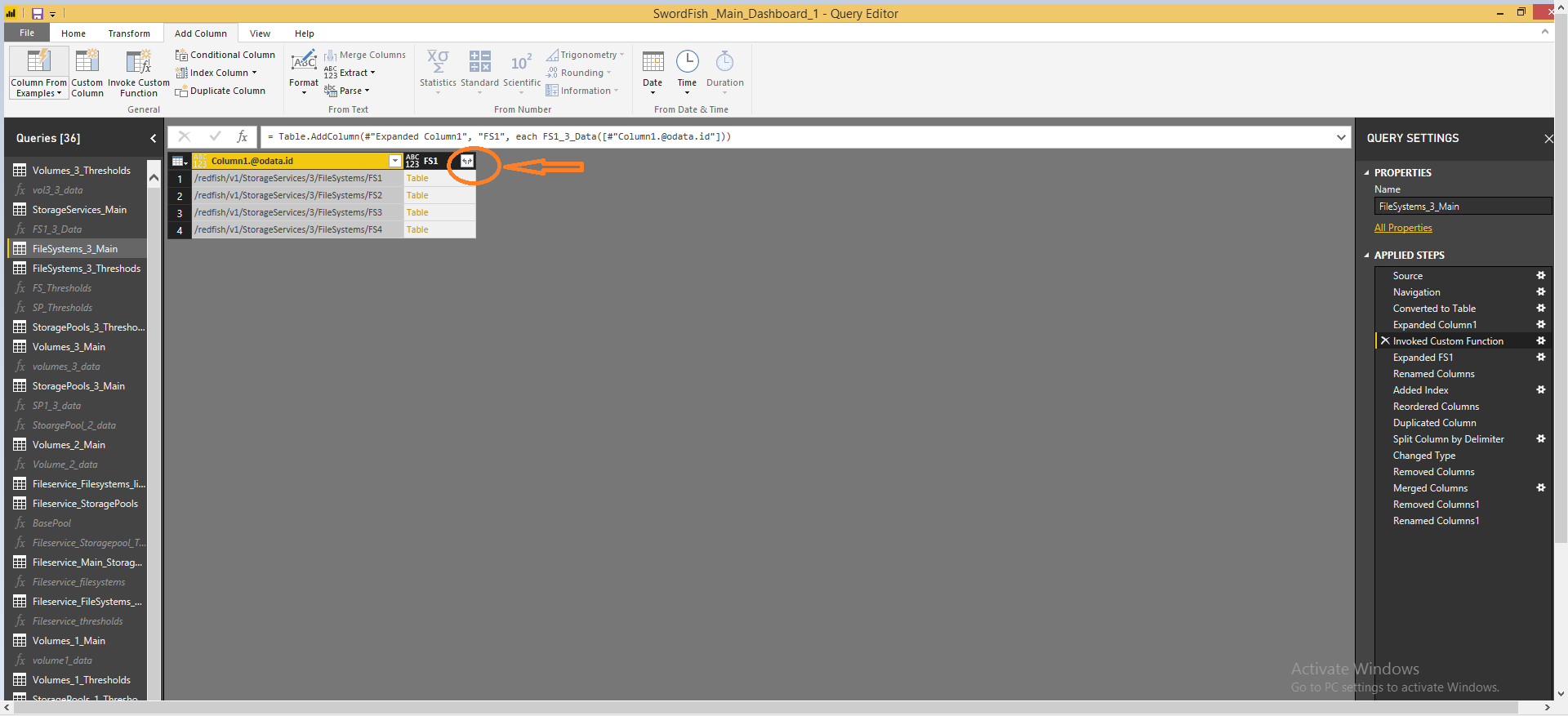
Step 2.8:-



It will ask about which one will invoke into this particular URL ’s Related above Main URL and click ok button

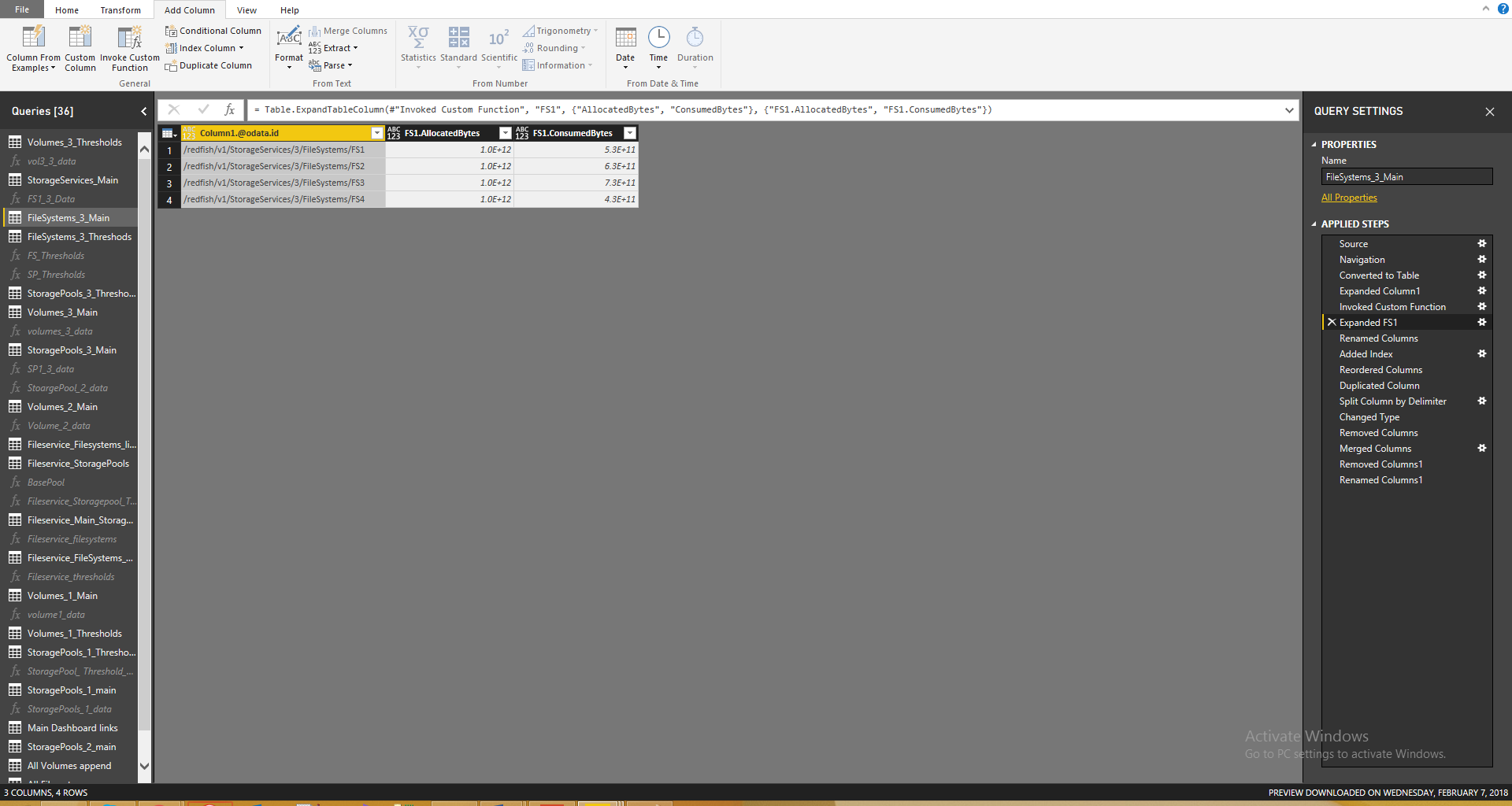
. Step 2.9:-

Once done expand the column by clicking FS1 column icon as shown in the below figure



Step 2.10:-

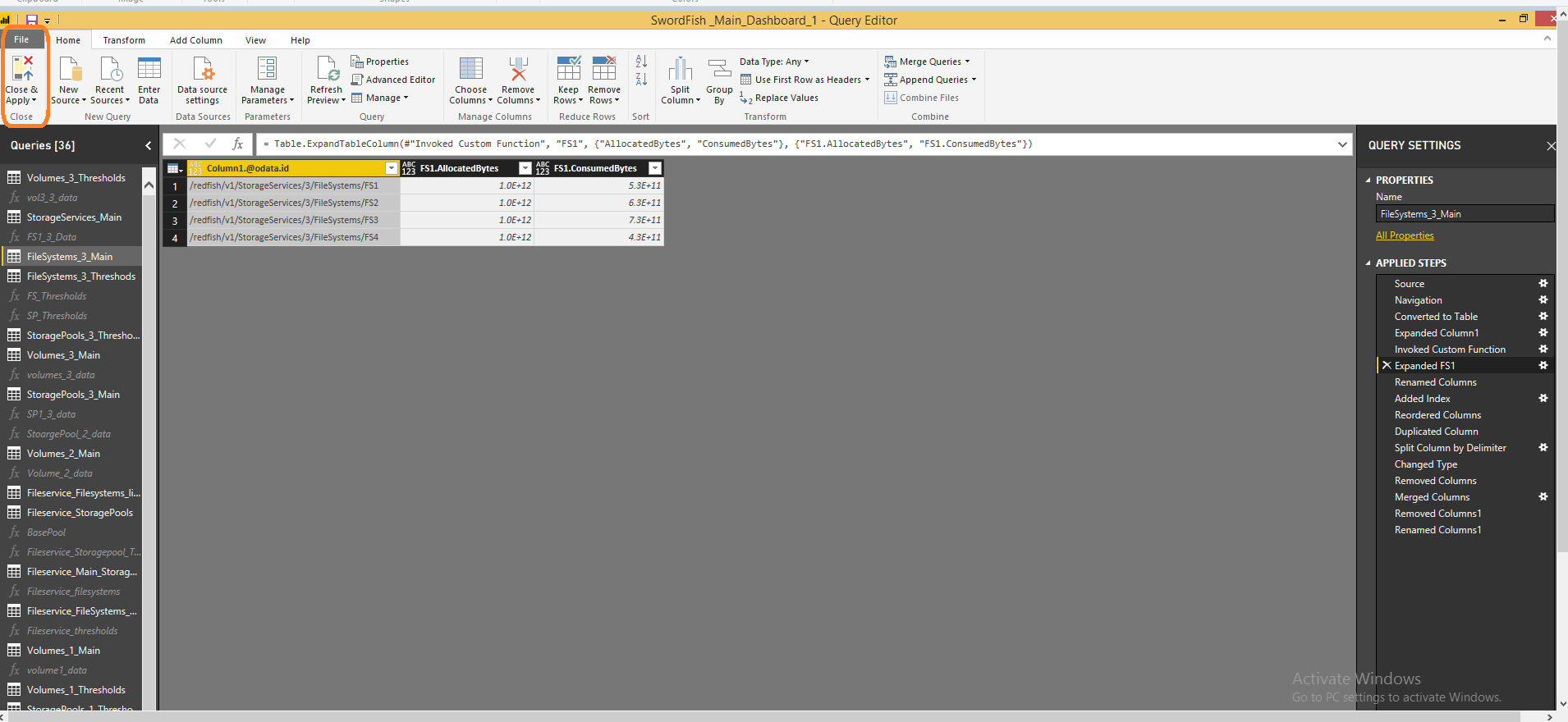
The window will expand as shown in the figure



Then Rename the columns as user understanding perspective.

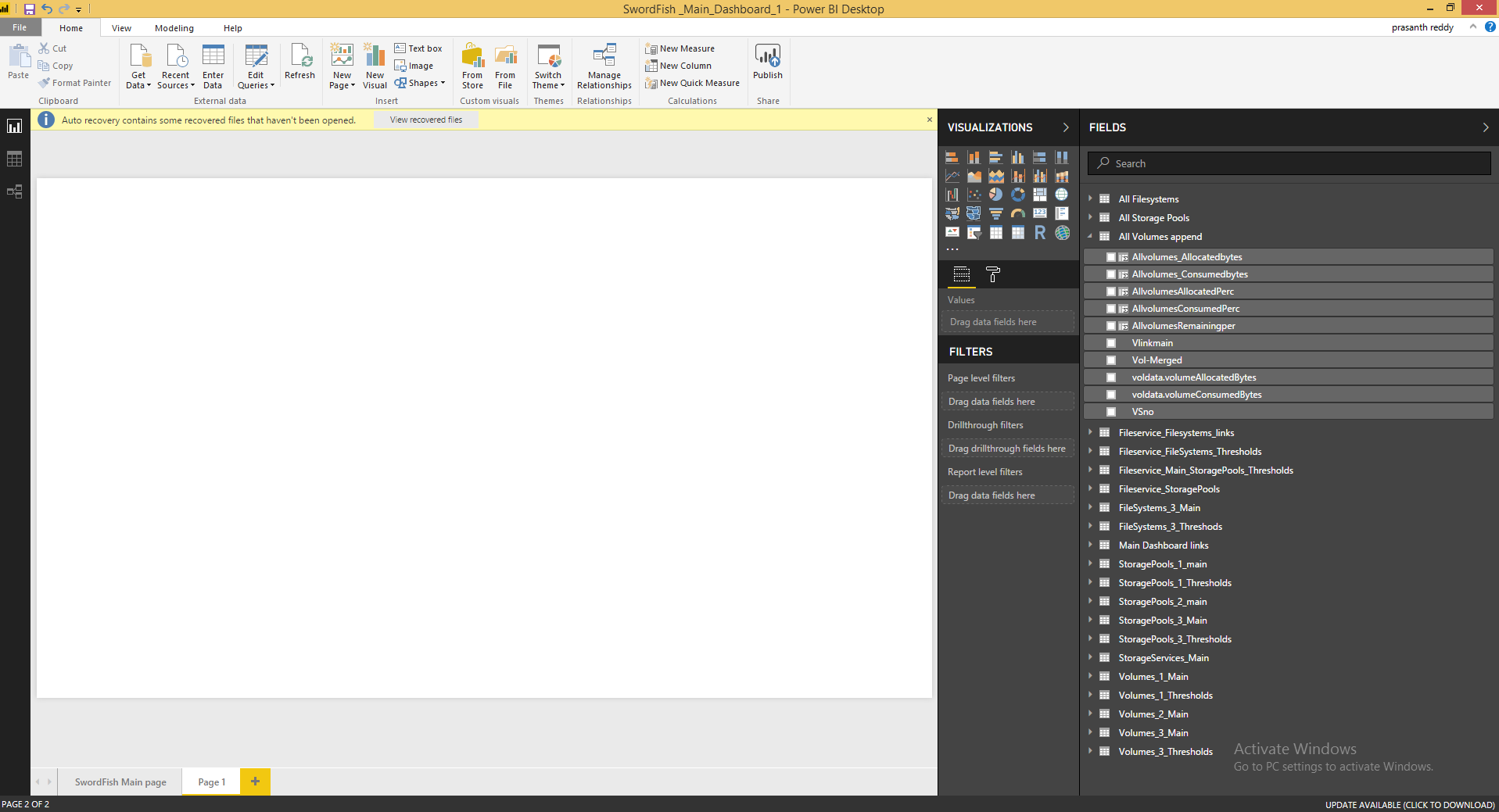
Step 2.11:-

click the “close &Apply “button as shown in the below figure



by clicking the “close&apply” button the Main page will come as shown in the below figure

Step 2.12:-



There after we calculated the capacity in bytes converted to terabytes and also calculated the percentages by using following formulae

Allocatedbytes = FileSystems\_3\_Main[FS1.AllocatedBytes] \* (1024\*1024\*1024\*1024)

Consumedbytes = FileSystems\_3\_Main[FS1.ConsumedBytes]/(1024\*1024\*1024\*1024)

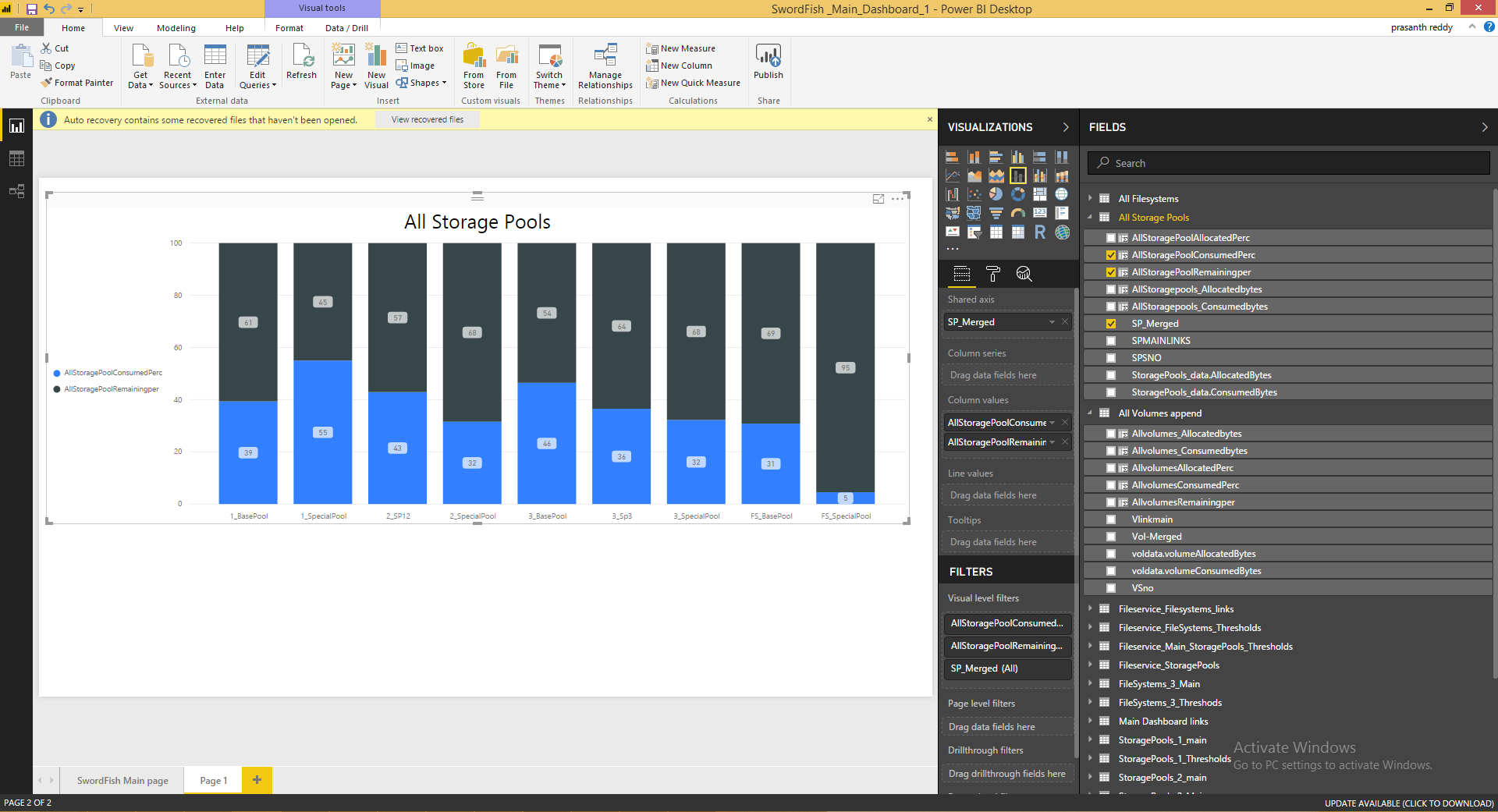
fsAllocatedperc = ([FS1.AllocatedBytes]\*100)/[FS1.AllocatedBytes]

fscalcnsumedperc = ([FS1.ConsumedBytes]\*100)/[FS1.AllocatedBytes]

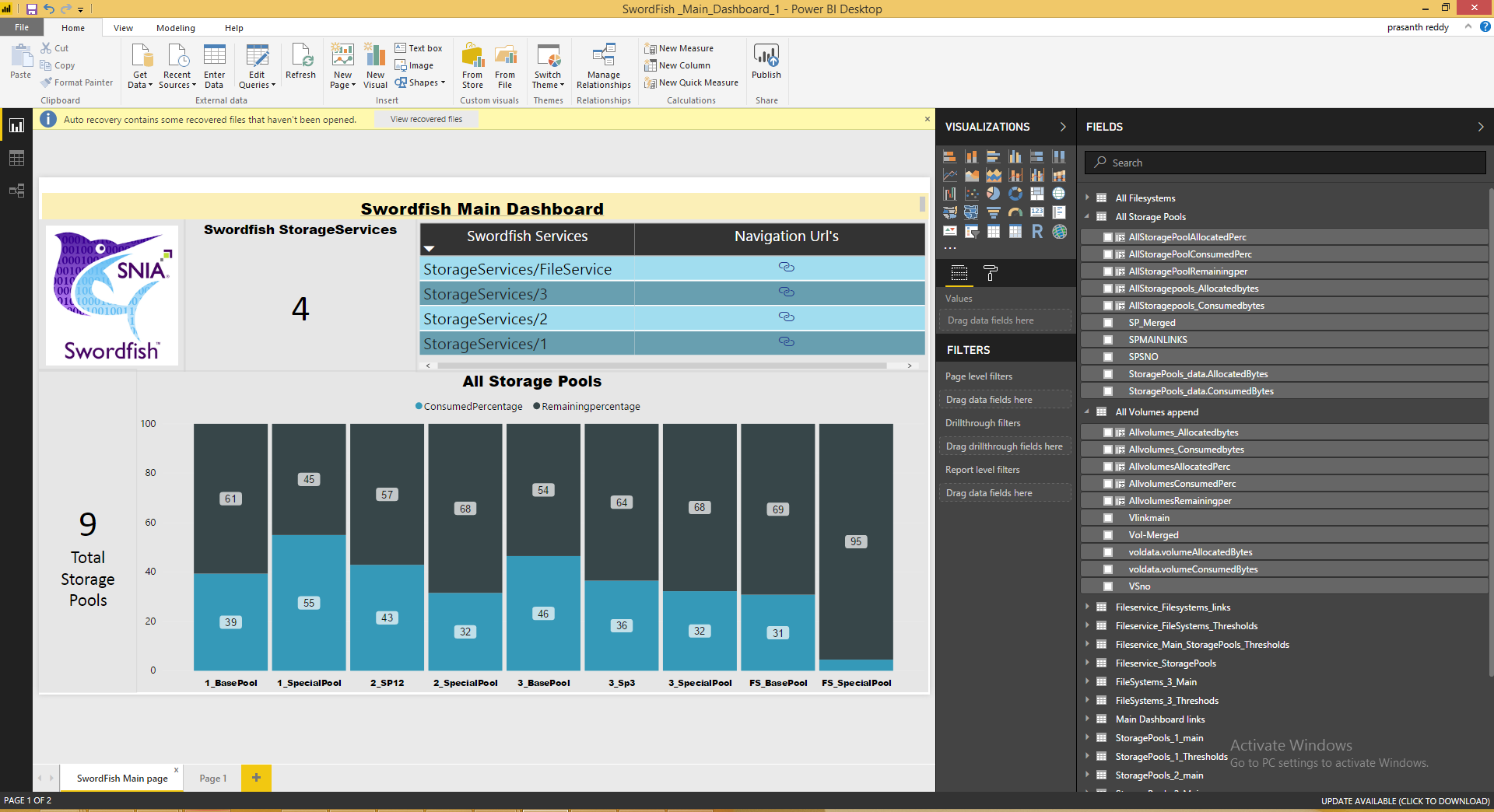
After converting the can take chart in visualization explorer and give the values and storage Pools links

Step 2.13:-

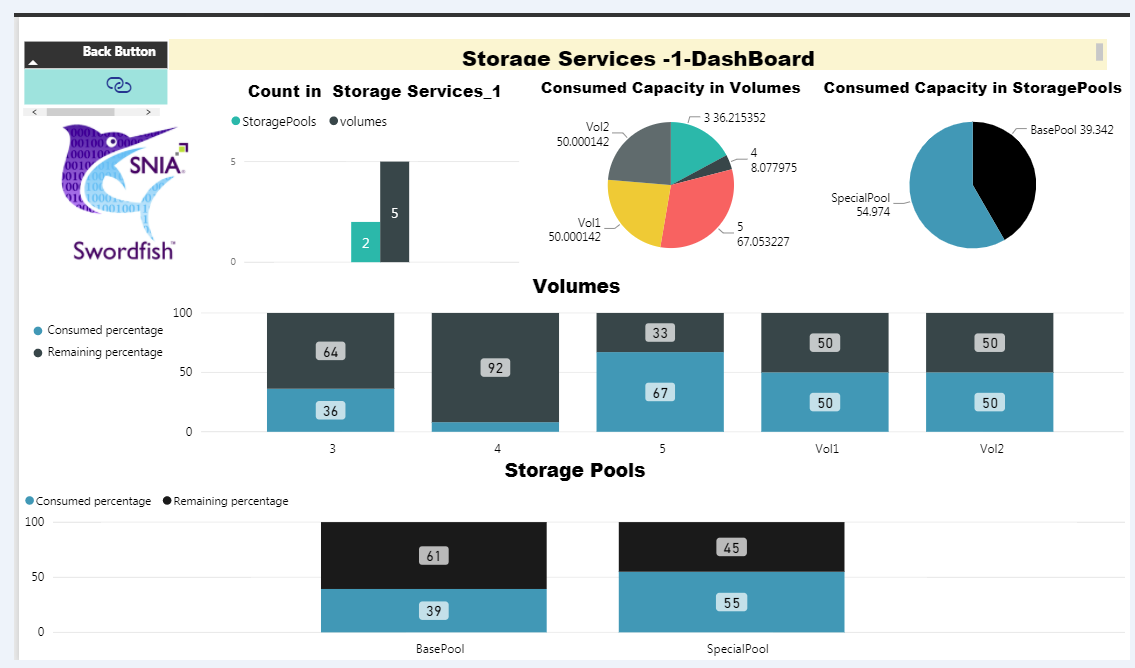
The below are the all Stoarge Pools URL’s Merged data



Follow same process for all the Dashboards will get the below Main Dashboard



**Fig:- Main Dashboard**



**Fig :- Child Dashboard**

so, we can create different dashboards for services by following above steps.