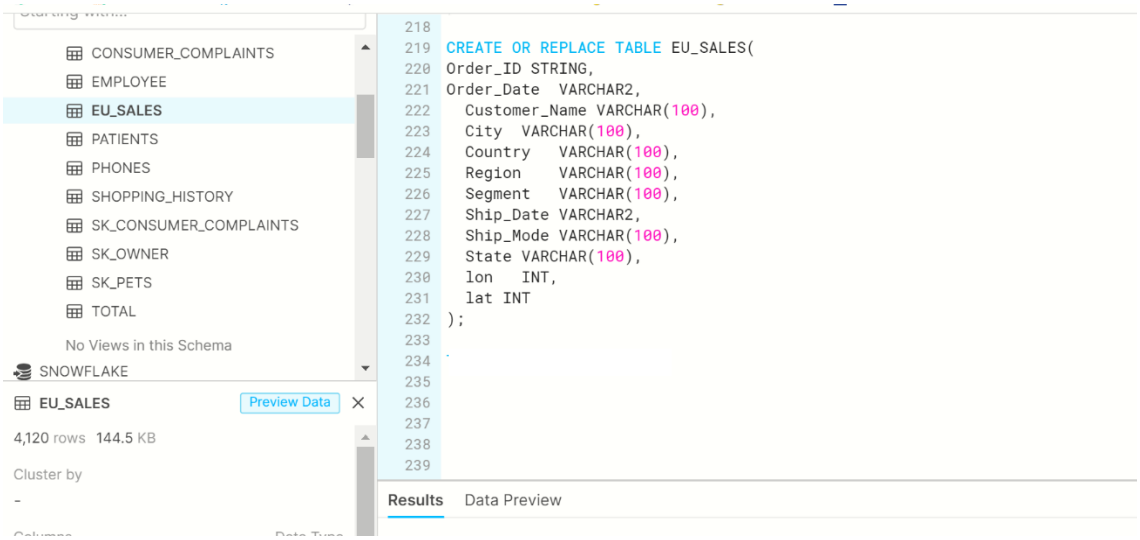
Data Visualization using Snowflake and PowerBI

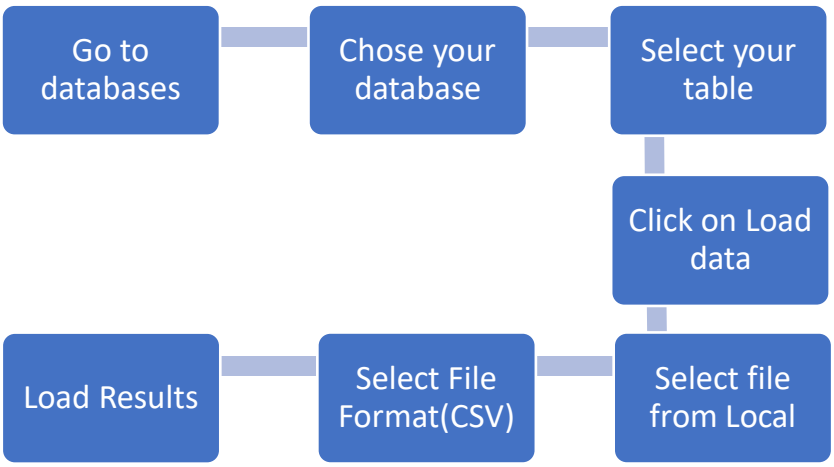
Introduction:

In this particular project we are going to insert a csv data file in a table created using Snowflake (SAAS) and then with the use of Microsoft PowerBI we will see the data visualization part done with the help of combination of both software.

STEP 1. Create a table on Snowflake using SQL commands named “EU_SALES”.

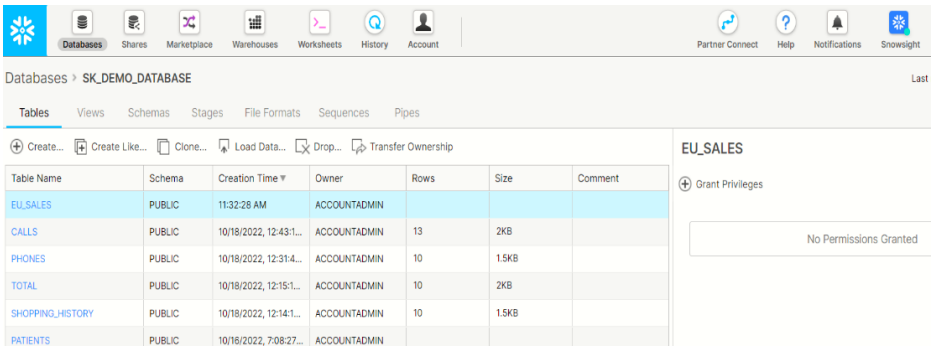


STEP 2. Load data from your local system to snowflake database:

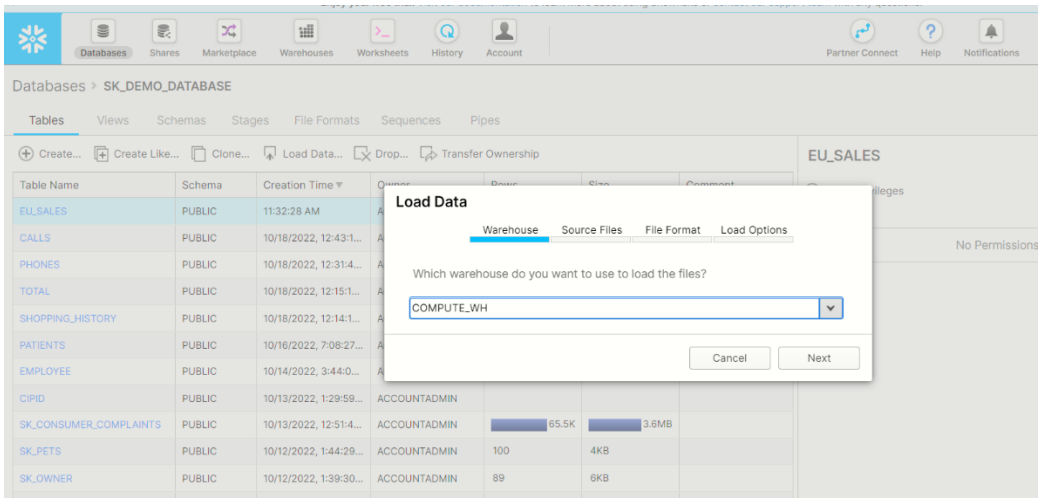


Now your table is successfully created along with data import.

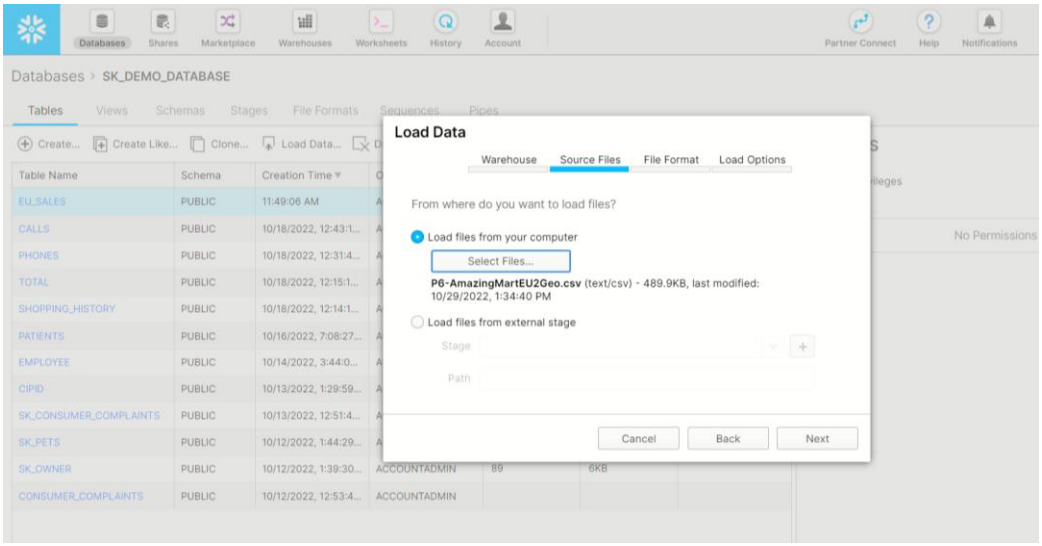
- Go to databases



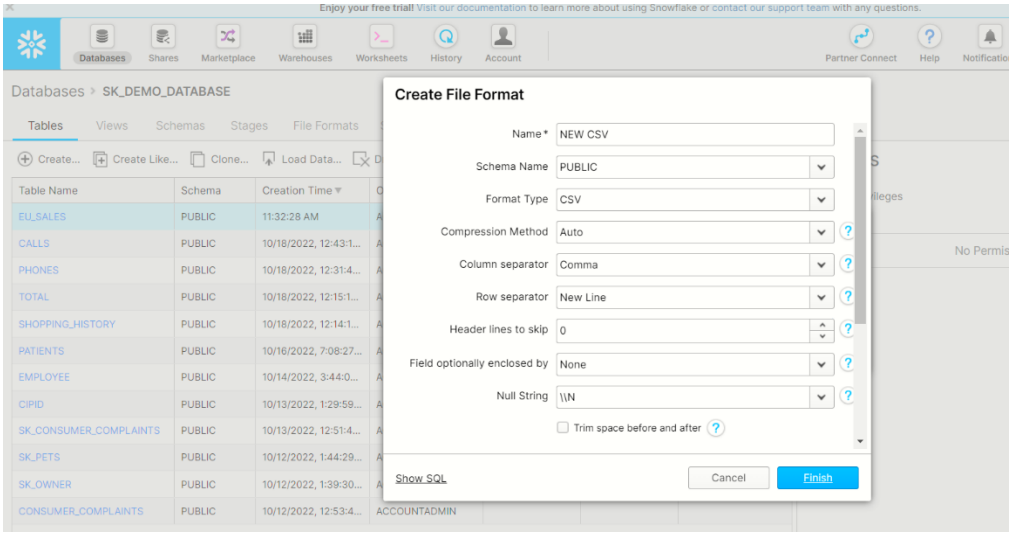
- Select your table

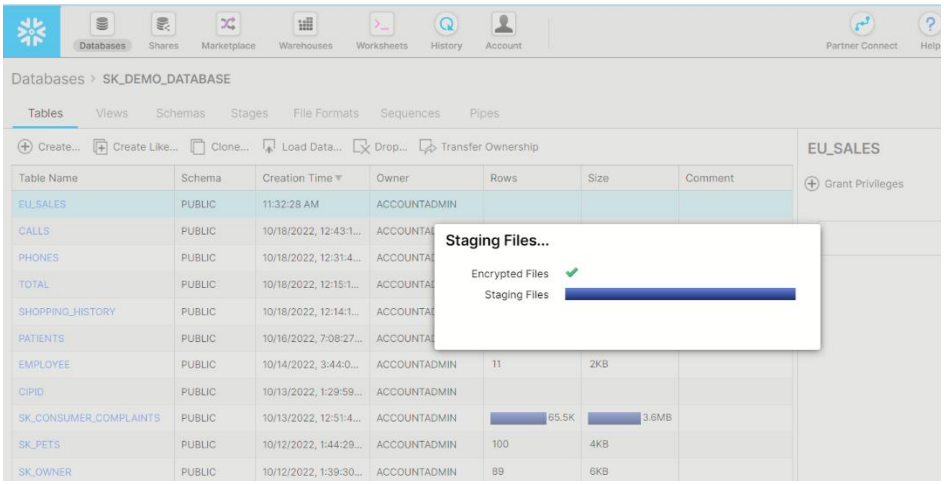


- Click on Load data

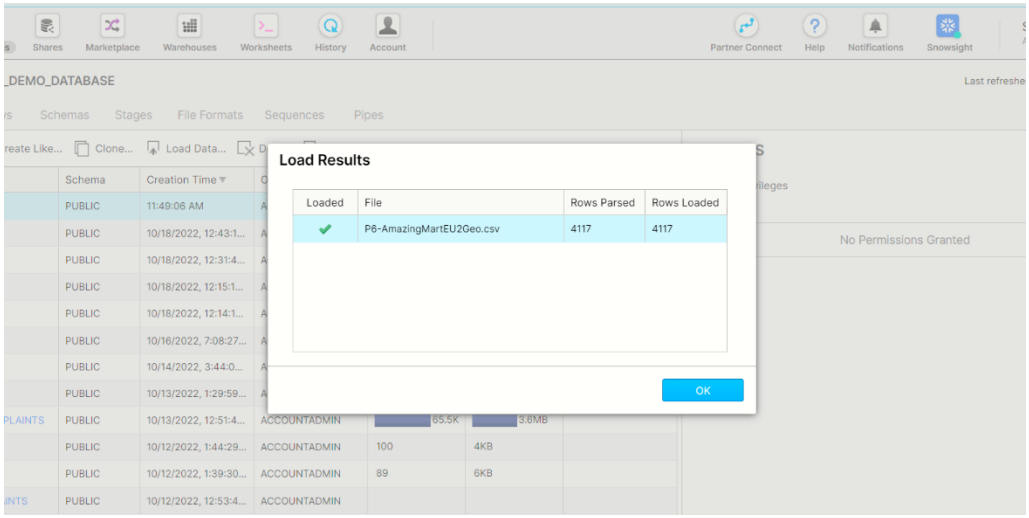


- Select File Format(CSV)

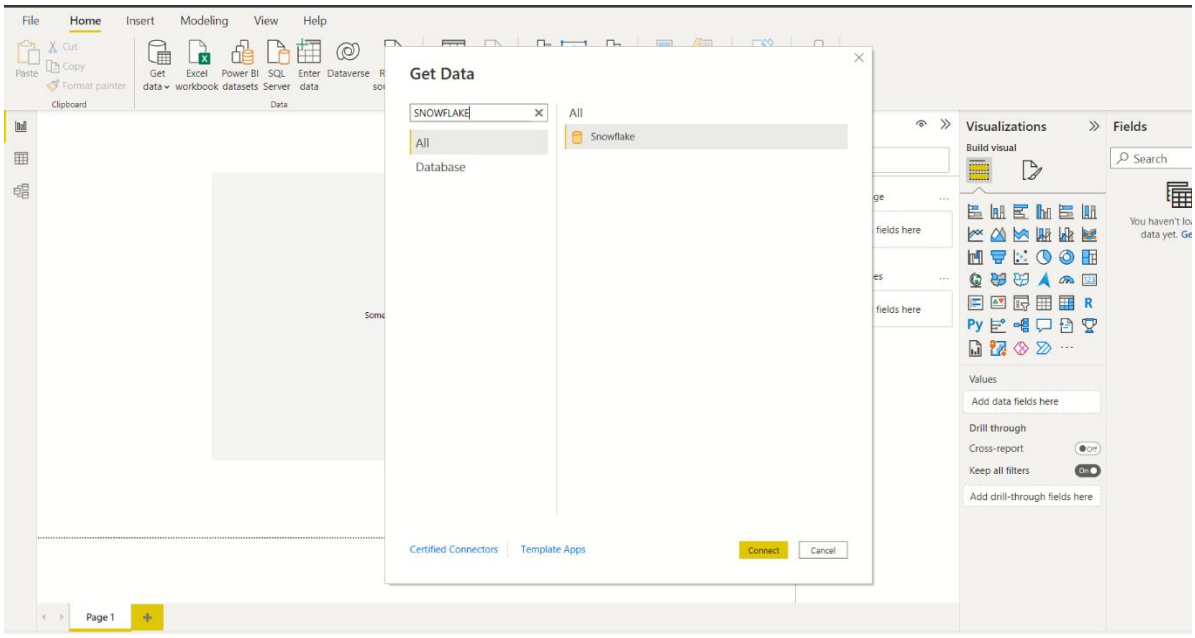




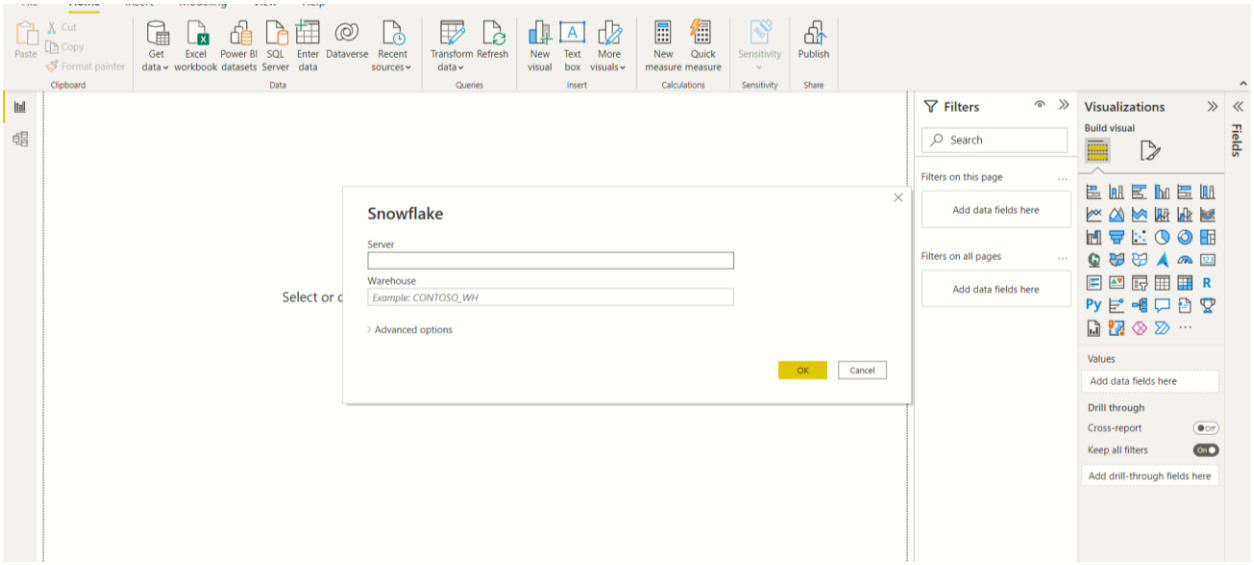
- Load Results



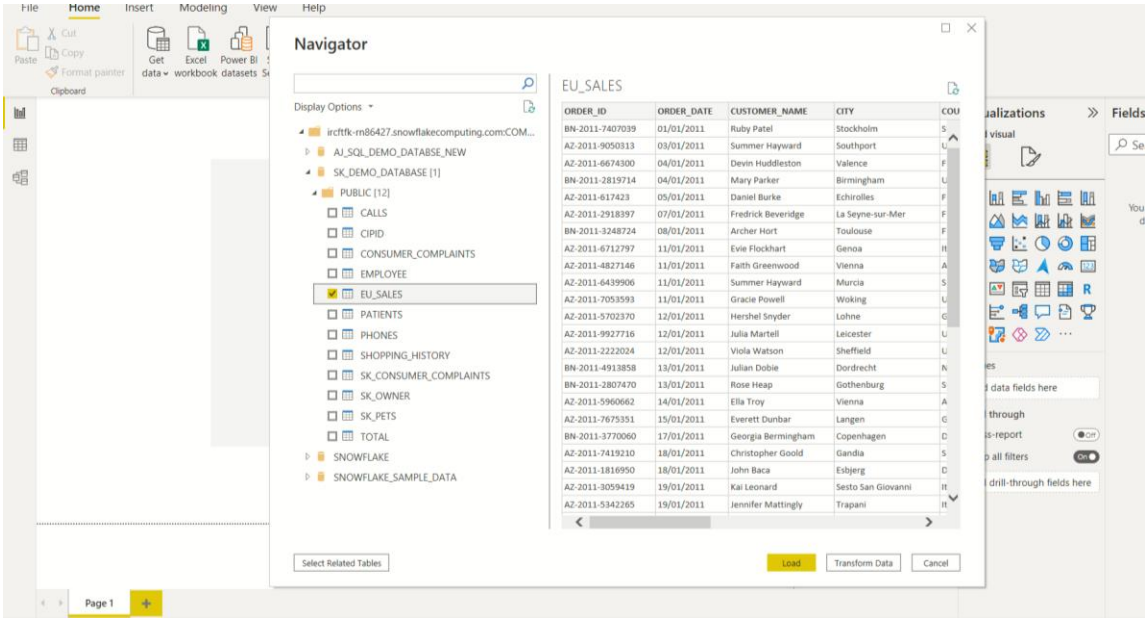
STEP 3. Now connect Snowflake to Microsoft PowerBI and then add this table ‘EU_SALES’. For this you need to know server and warehouse name.



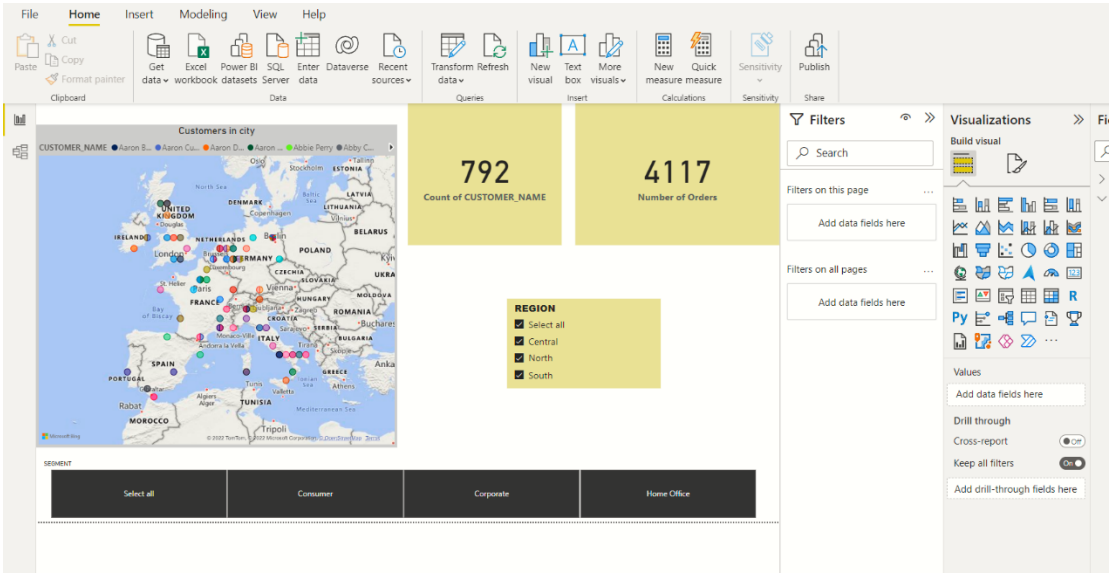
STEP 4. Go to Power bi click to Get Data and select source Snowflake and then connect inserting server name and warehouse name.



STEP 5. After connecting to warehouse select your database in which table is situated form dropdown and then select your EU-SALES table and click load. Select DirectQuery from connection setting.



STEP 6. Now create a dashboard to see your data in graphs, maps and what not.



STEP 7. Now PowerBI is connected to Snowflake so if you later change your data in EU_SALES table it will automatically reflect in PowerBI.

To show this feature I deleted previous data and upload with new data on Snowflake.

Old data 4117 records.

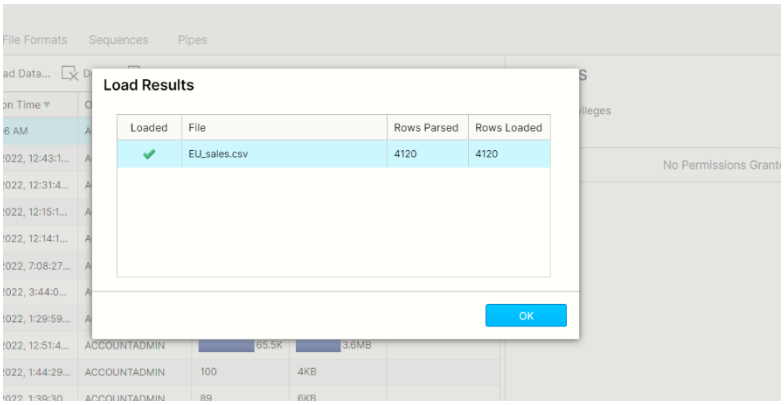
For showing purpose I've added three new rows in csv file in EU_SALES data sheet and load them again on snowflake following previous method.

These are 3 new records:

4117	AZ-2014-7	31/12/2014	Rebecca C	Hamburg	Germany	Central	Home Offi	04/01/2015	Economy	Hamburg	9.99	53.55
4118	BN-2014-4	31/12/2014	Daniel Har	Eindhoven	Netherlan	Central	Home Offi	05/01/2015	Economy	North Bral	5.47	51.44
4119	BN-2014-1	31/12/2014	Saurabh Ka	Kanpur	India	Offside	Home Offi	06/01/2015	Economy	UP	77.49	26.45
4120	BN-2014-1	01/01/2015	Ashutosh I	Lucknow	India	Offside	Home Offi	07/01/2015	Economy	UP	80.95	26.85
4121	BN-2014-1	01/01/2015	Himanshu	Unnao	India	Offside	Home Offi	08/01/2015	Economy	UP	80.48	26.54
4122												
4123												

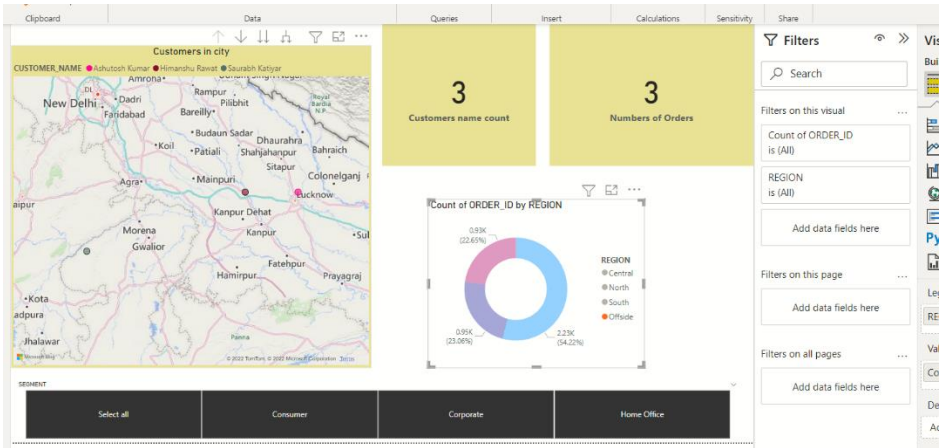
Let's see if these get inserted in PowerBI automatically or not after insertion in snowflake.

New data 4120 records.



For making it easier I have written region as 'offside' which is unique in whole dataset so that our new values get easily reflected to us.

STEP 8. By selecting 'offside' in region you can see our new entries are showing in visuals.



All the values of three new records are showing up without changing data PowerBI because of its connection with snowflake and DirectQuery option.