

Introduction to “Parameter” Or “Prompts”

Version 1.0

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Purpose

This document covers the concept of “Parameter” or “Prompts” in Power BI. This is high level document and assume resource has basic knowledge of Power BI Concepts.

In this document, we are going to show how to apply parameter by adding query form object.

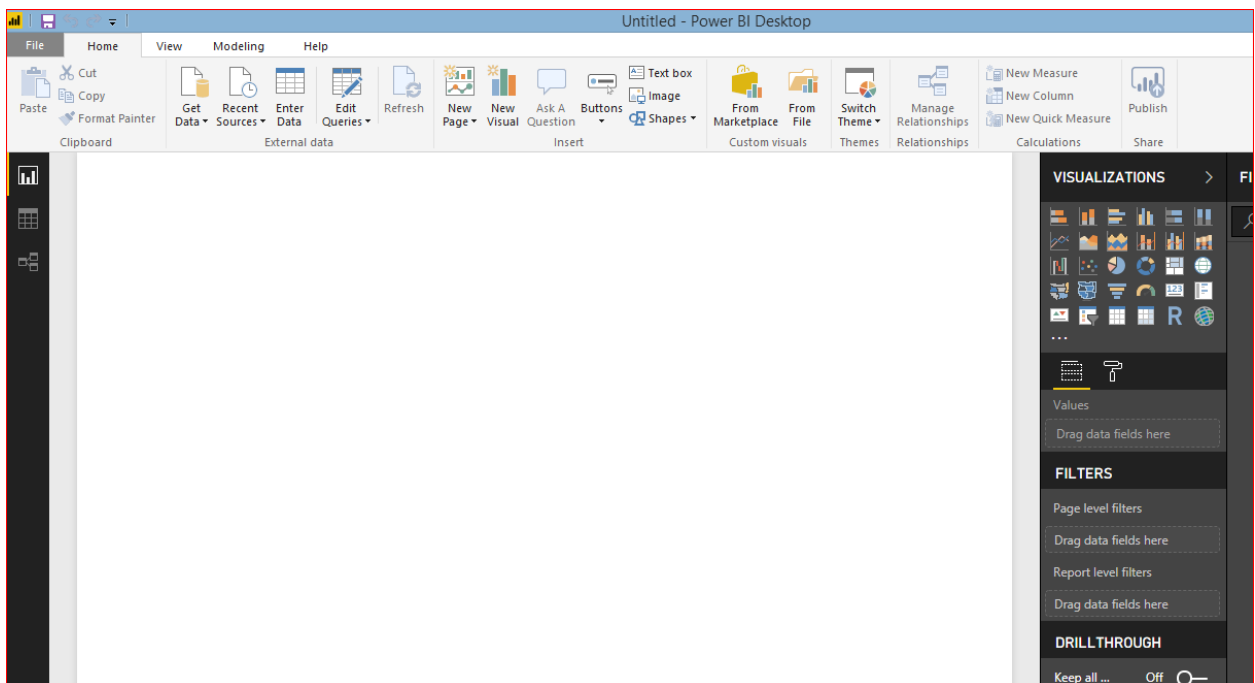
What is “Parameter” Or “Prompts”?

Parameter is the special kind of variable which argue to report or dashboard to shows resulting data related to passed input value. Parameter is an object of information - such as a name, a number, or a selected option - that is passed to a program by a user or another program. Parameters affect the operation of the program by receiving input.

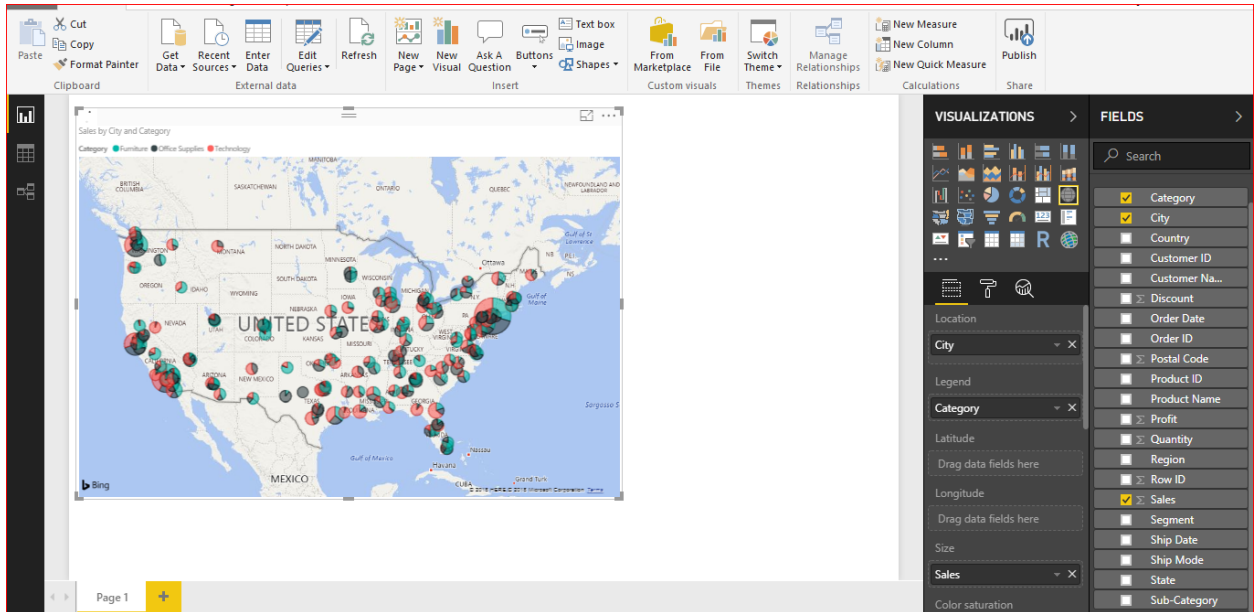
How to apply parameter in Power BI?

It is very easy to pass the parameter in Power BI. Please follow the below steps to create and pass the parameters.

1. Open the Power BI Desktop and Click on “Home” ribbon.



2. Connect with the data source to load the data into Power BI.



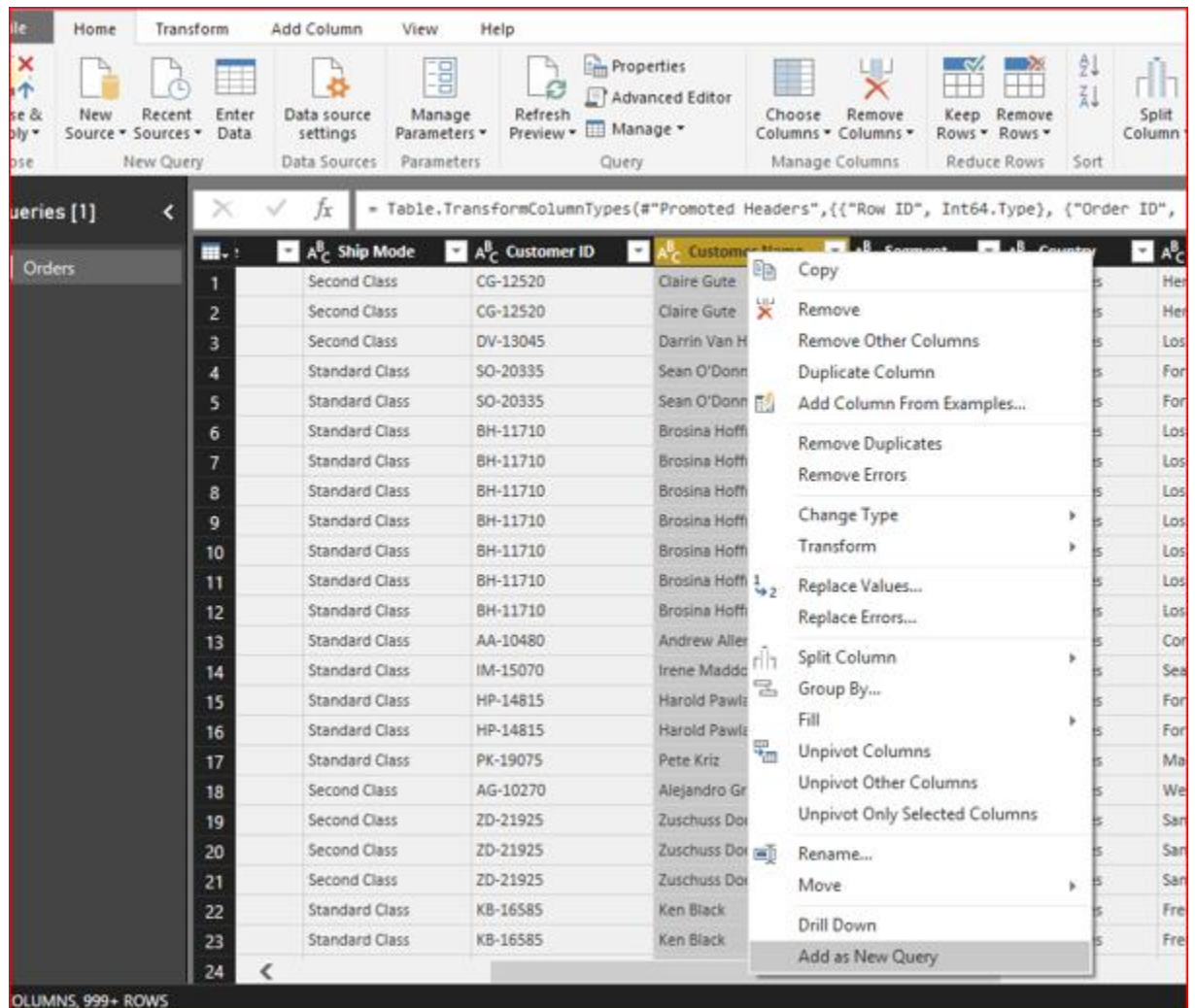
3. Click on the Edit Query button and new window will get opened as shown in below image.

The screenshot shows the Power Query Editor window. The ribbon at the top includes options like File, Home, Transform, Add Column, View, and Help. The main area displays a table of data with columns for Row ID, Order ID, Order Date, Ship Date, and Ship Mode. The right pane shows the Properties and Applied Steps panes.

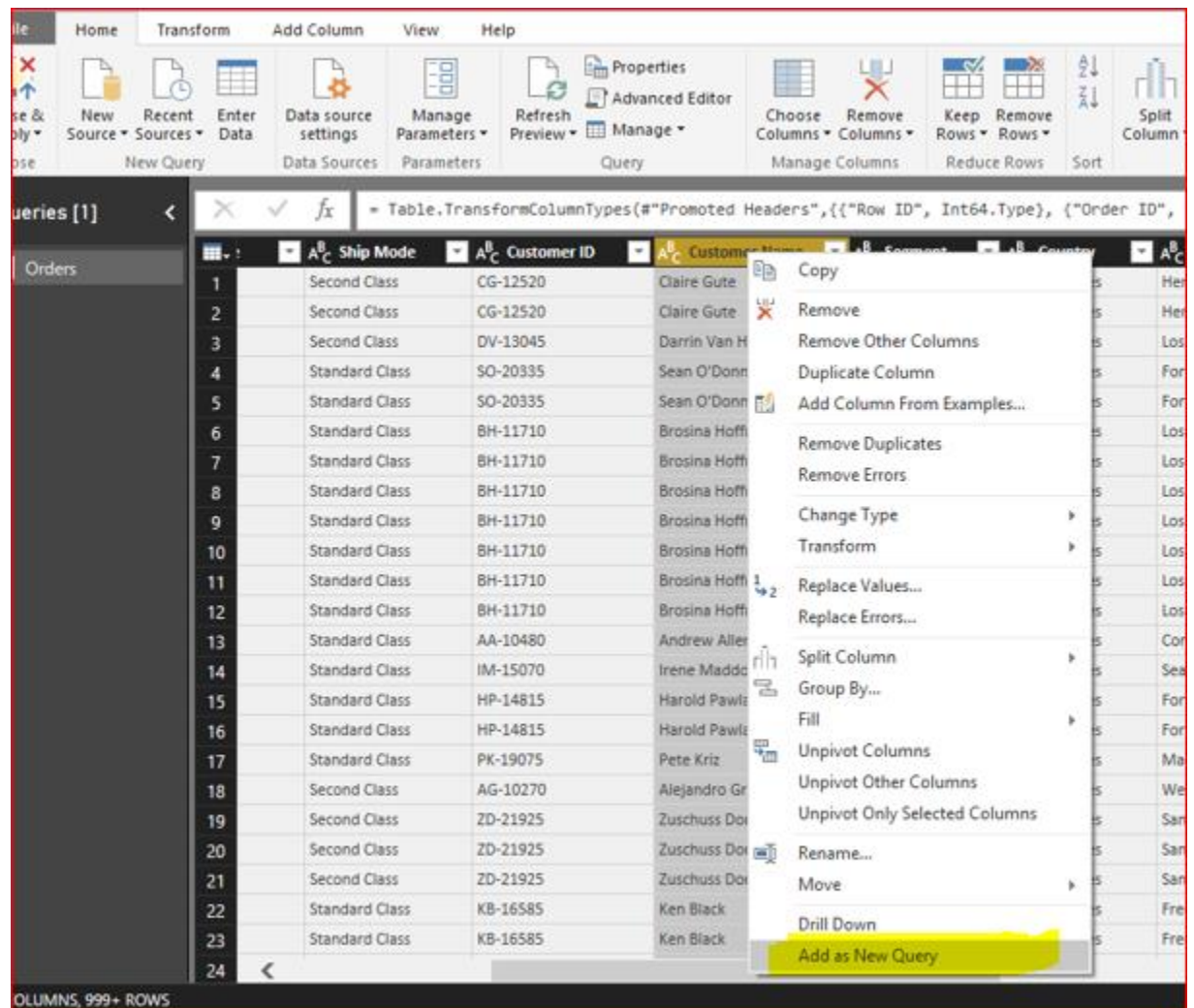
Row ID	Order ID	Order Date	Ship Date	Ship Mode
1	CA-2016-152156	08-11-2016	11-11-2016	Second Class
2	CA-2016-152156	08-11-2016	11-11-2016	Second Class
3	CA-2016-138688	12-06-2016	16-06-2016	Second Class
4	US-2015-108966	11-10-2015	18-10-2015	Standard Class
5	US-2015-108966	11-10-2015	18-10-2015	Standard Class
6	CA-2014-115812	09-06-2014	14-06-2014	Standard Class
7	CA-2014-115812	09-06-2014	14-06-2014	Standard Class
8	CA-2014-115812	09-06-2014	14-06-2014	Standard Class
9	CA-2014-115812	09-06-2014	14-06-2014	Standard Class
10	CA-2014-115812	09-06-2014	14-06-2014	Standard Class

How to create Query: - We can create query for any object that is available in table. For the document purpose, we need to create query for parameter input value as follows: -

- I. Right click on the object which we want to show as a “Prompt”



II. Click on “Add as New Query” option.

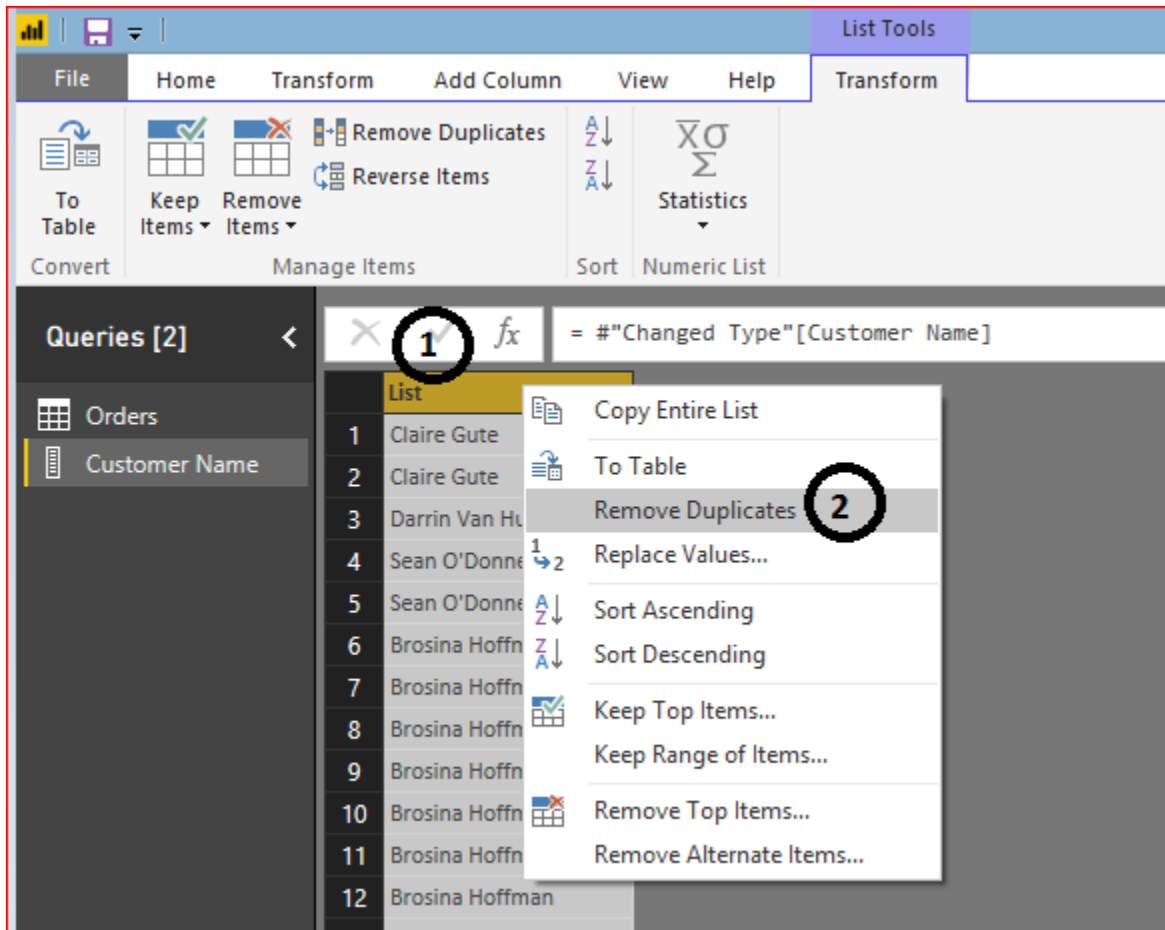


III. After clicking on “Add as New Query” option, it will create the new Query.

The screenshot displays the Power BI Desktop interface. The 'Transform' ribbon is active, showing options like 'To Table', 'Keep Items', 'Remove Items', 'Remove Duplicates', 'Reverse Items', 'Sort', and 'Statistics'. The 'Queries [2]' pane on the left shows a list of queries: 'Orders' and 'Customer Name'. The 'Customer Name' query is selected, and its data is displayed in the main view. The data is a list of 24 customer names, with the first two being 'Claire Gute' and the last one being 'Sandra Flanagan'. The formula bar at the top shows the expression: `= #"Changed Type"[Customer Name]`. The status bar at the bottom indicates '999+ ITEMS'.

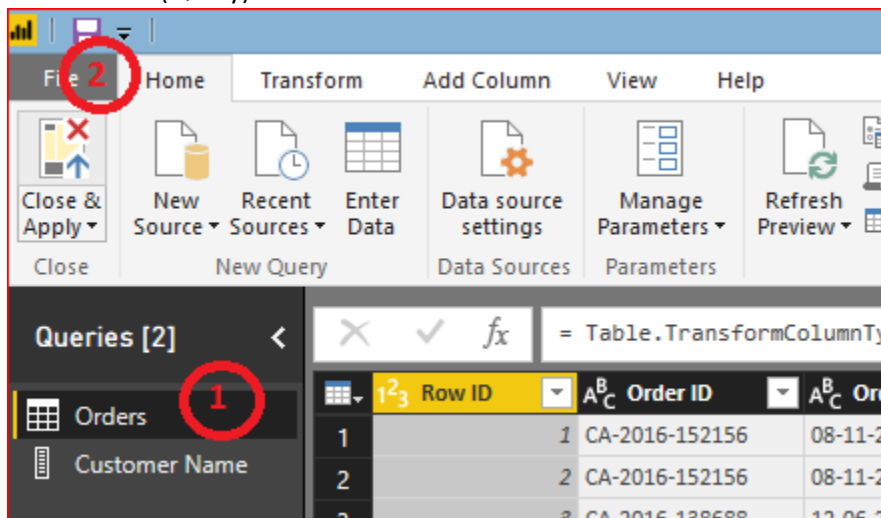
	List
1	Claire Gute
2	Claire Gute
3	Darrin Van Huff
4	Sean O'Donnell
5	Sean O'Donnell
6	Brosina Hoffman
7	Brosina Hoffman
8	Brosina Hoffman
9	Brosina Hoffman
10	Brosina Hoffman
11	Brosina Hoffman
12	Brosina Hoffman
13	Andrew Allen
14	Irene Maddox
15	Harold Pawlan
16	Harold Pawlan
17	Pete Kriz
18	Alejandro Grove
19	Zuschuss Donatelli
20	Zuschuss Donatelli
21	Zuschuss Donatelli
22	Ken Black
23	Ken Black
24	Sandra Flanagan

IV. Now right click on column and select “Remove the duplicates”.

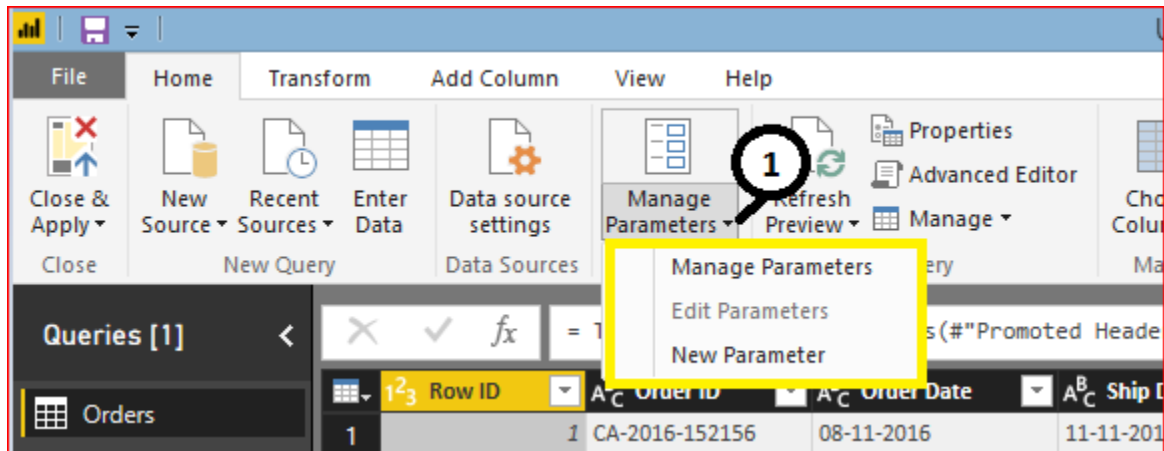


In this way we have created the Query for input parameter. Now proceed with the below steps:

4. Go to Table1(Query) and click on Home ribbon.



- Click on “Manage Parameter” icon and in drop-down “New Parameter” and “Manage Parameter” option will be highlighted.



- To create the New parameter, click on “New Parameter” and below window will appears

The screenshot shows the 'Parameters' dialog box. On the left, there is a list of parameters with 'Parameter1' selected. On the right, the details for 'Parameter1' are shown:

- Name: Parameter1
- Description: (empty text box)
- ☒ Required
- Type: Any
- Suggested Values: Any value
- Current Value: (empty text box)

At the bottom right, there are 'OK' and 'Cancel' buttons.

7. Change the default name "Parameter1" to as per the requirement.

Parameters

New

Customer

Name

Customer

Description

☒ Required

Type

Any

Suggested Values

Any value

Current Value

OK

Cancel

8. Give the description in "Description" text box.
9. Tick the check box for field "Required".

Parameters

New

Customer

Name

Customer

Description

☒ Required

Type

Any

Suggested Values

Any value

Current Value

OK

Cancel

10. In “Type” we can select the data type for parameter. Below is the image showing the list of data types available in Power BI.

The screenshot shows the 'Parameters' dialog box in Power BI. On the left, there is a list of parameters with a 'New' button and a 'Customer' parameter selected. On the right, the configuration for the 'Customer' parameter is shown. The 'Name' field contains 'Customer'. The 'Description' field is empty. The 'Required' checkbox is checked. The 'Type' dropdown menu is open, showing a list of data types: Any, Decimal Number, Date/Time, Date, Time, Date/Time/Timezone, Duration, Text, True/False, and Binary. The 'Any' option is currently selected.

Name	Description	Required	Type
Customer		☒	Any

11. In “Suggested Values” there are three options available.

Parameters

New

Customer

Name

Customer

Description

☒ Required

Type

Any

Suggested Values

Any value

Any value

List of values

Query

Any Value: - Here we can pass any value as parameter input value.

List of Value: - We need to provide the List of values that we are going to pass as parameter input values.

Parameters

New

Customer

Name

Customer

Description

☒ Required

Type

Any

Suggested Values

List of values

1	Calire Gute
2	Adam Hart
3	Pete Kriz
*	

Select the "Query" in "Suggested Values" box and then select the created query in "Query" box as shown in below image.

The image shows a 'Parameters' dialog box with the following fields and options:

- Name:** Customer
- Description:** (Empty text box)
- Required:** ☒ Required
- Type:** Any (Dropdown menu)
- Suggested Values:** Query (Dropdown menu)
- Query:** Customer Name (Dropdown menu)
- Current Value:** (Empty text box)

Buttons at the bottom right: OK, Cancel

12. After this put "Current Value" and click on Ok button.

Parameters

New

Customer

Name

Customer

Description

☒ Required

Type

Any

Suggested Values

Query

Query ⓘ

Customer Name

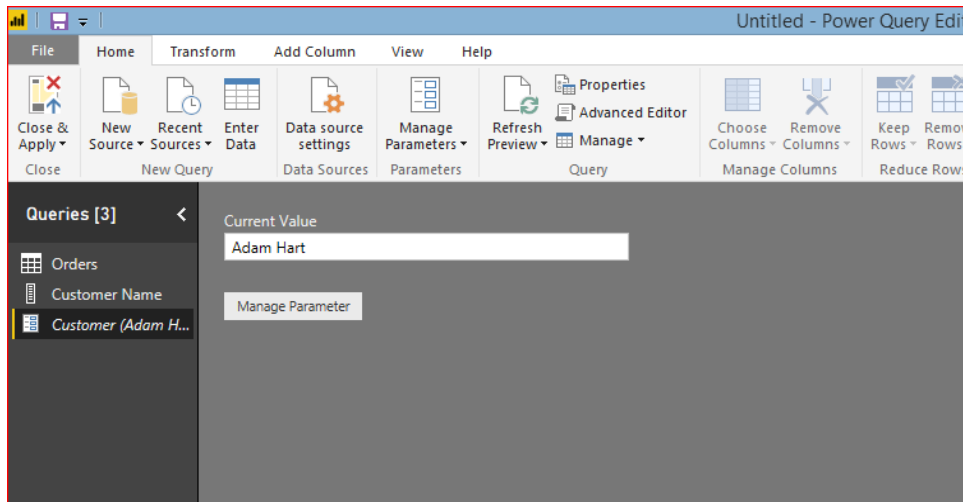
Current Value

Adam Hart

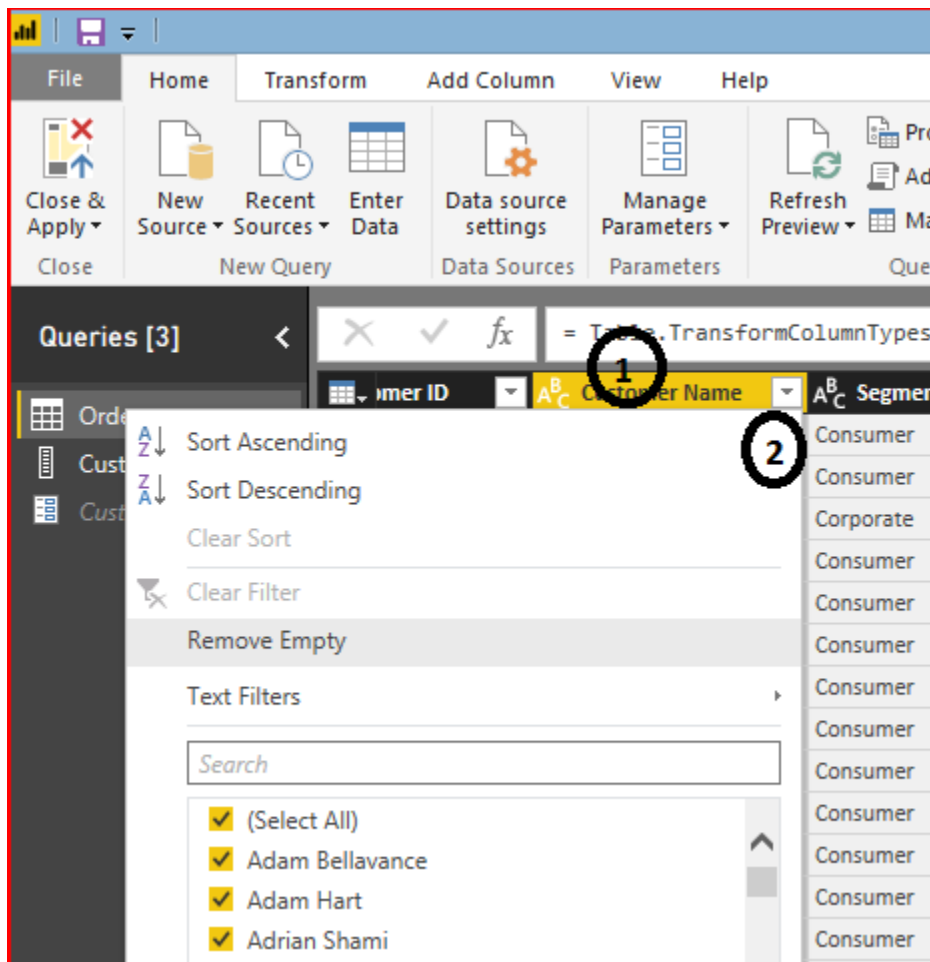
OK

Cancel

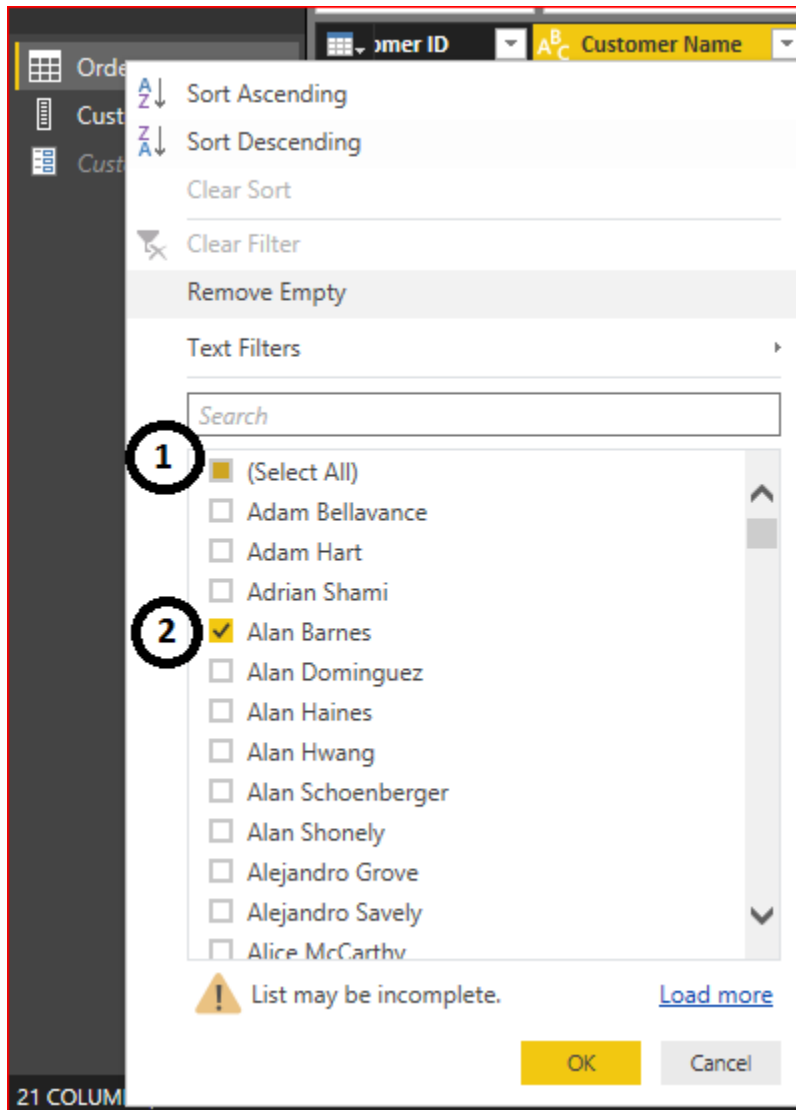
13. After clicking on Ok button, it will show the created parameter.



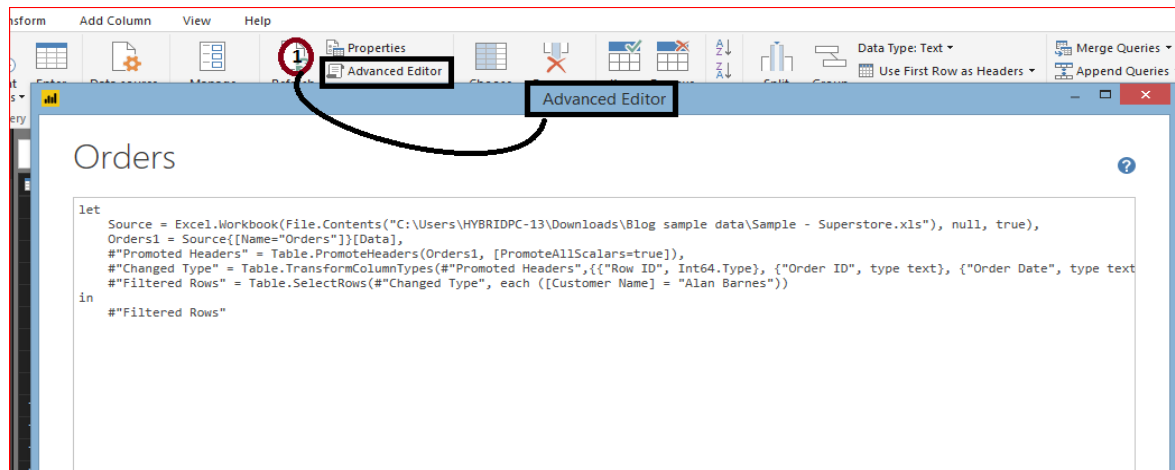
14. Go to the query and select the object where we want to apply the input parameter then click on the arrow.



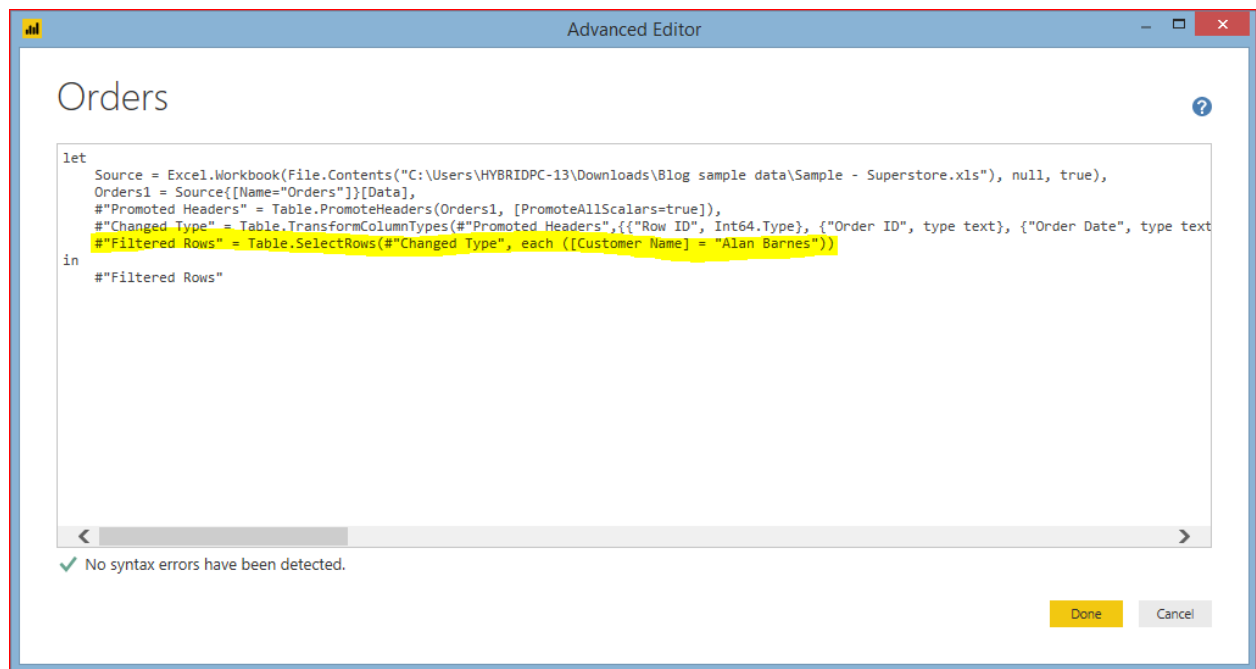
15. Now click on “Select All” and select any single value from the list provided and click on OK button.



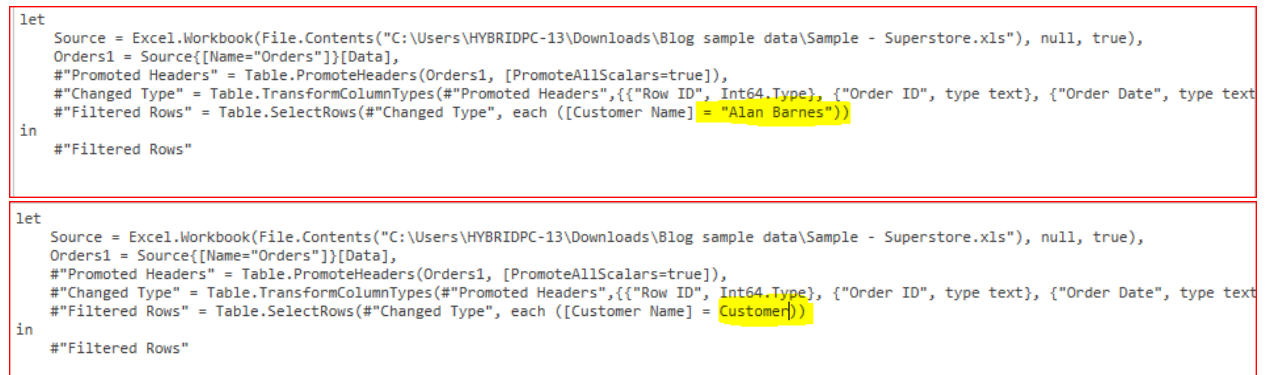
16. Click on the “Advance Editor” and below window will get opened.



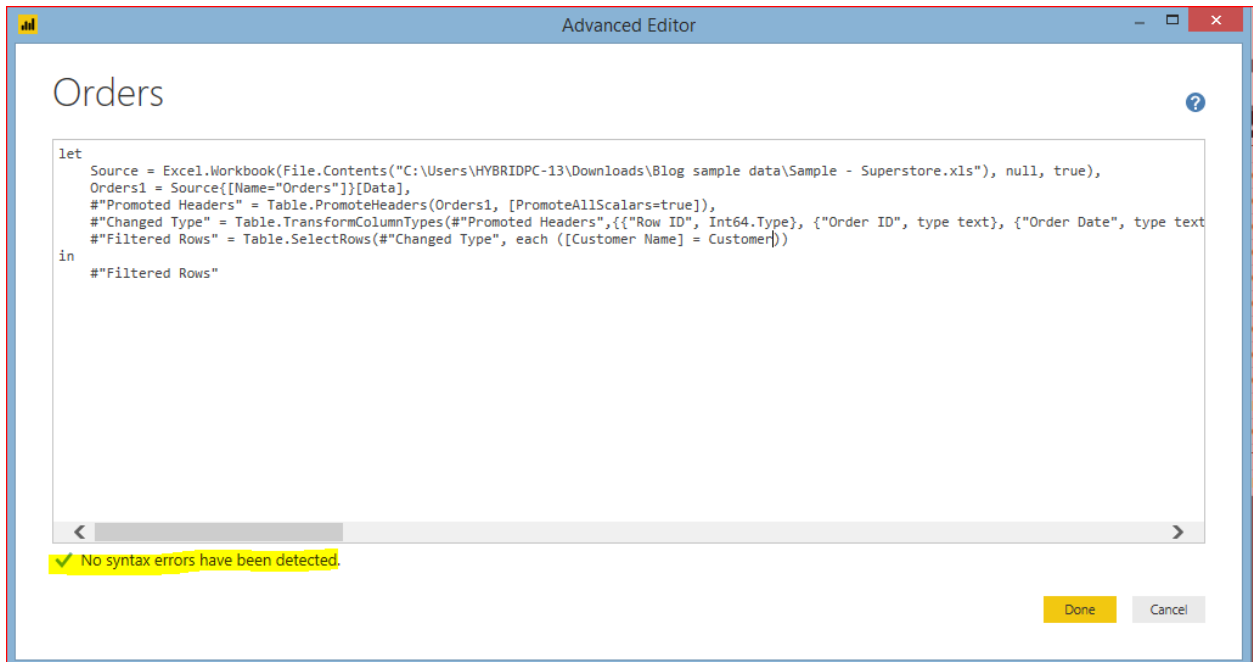
17. We can see the last line in the query is filtering the data.



18. Erase the filter value and insert the Parameter name which we have created.



Also make sure there is no error in syntax. If error is there, we must have resolved it and after that click on “Done”.



19. Refresh the data, to show the resulting data for given Input "Current value".

Untitled - Power Query Editor

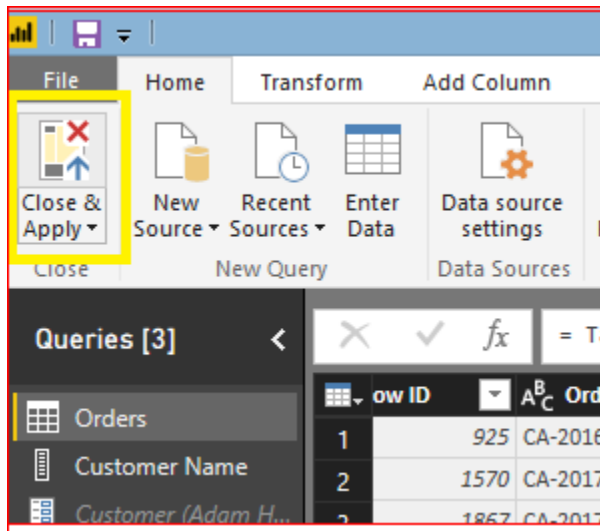
File Home Transform Add Column View Help

Close & Apply New Source Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Manage Choose Columns Remove Columns Keep Rows Remove Rows Sort Split Column Group By Data Type: Text Use First Row as Headers Replace Values

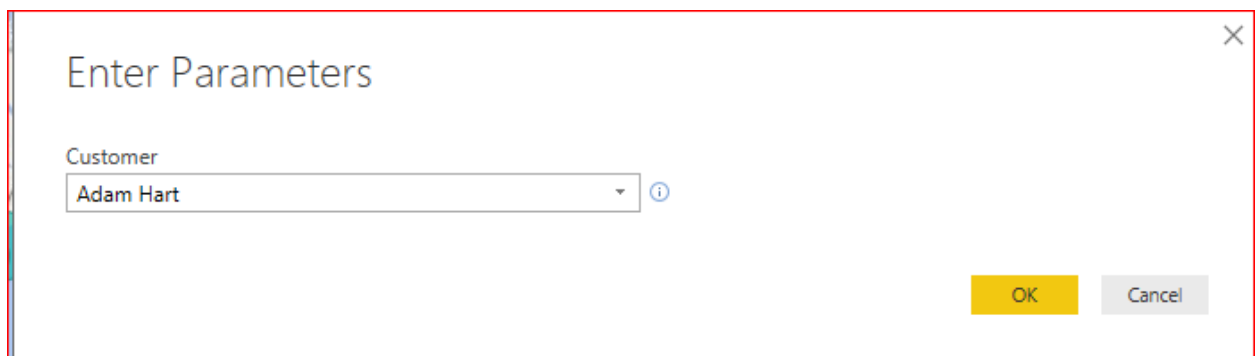
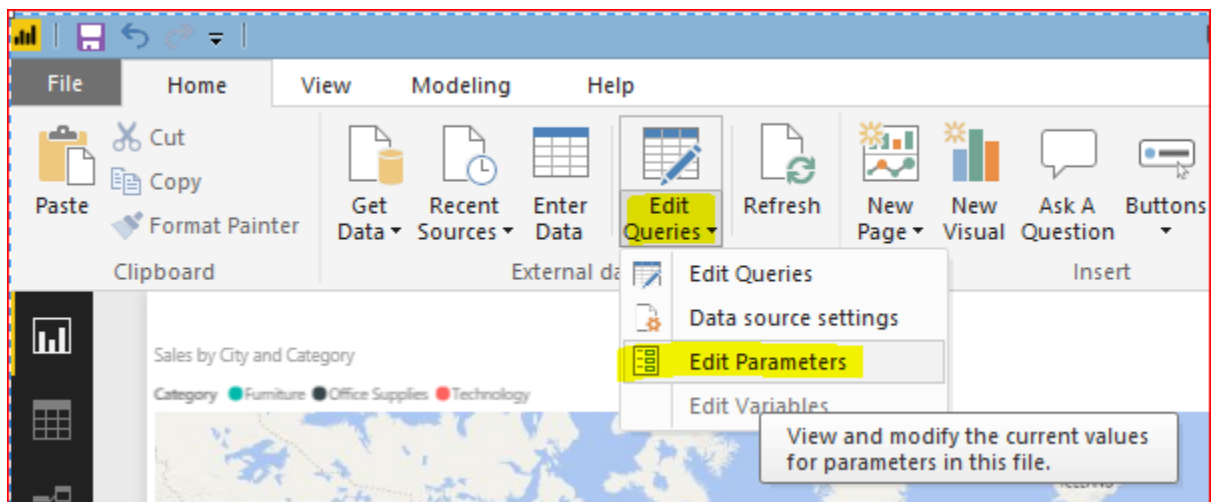
Queries [3] < X ✓ fx = Table.SelectRows("#'Changed Type", each ([Customer Name] = Customer))

	ow ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID	Customer Name	Segment
1	925	CA-2016-149797	15-09-2016	20-09-2016	Standard Class	AH-10075	Adam Hart	Corporate
2	1570	CA-2017-165029	26-11-2017	30-11-2017	Standard Class	AH-10075	Adam Hart	Corporate
3	1867	CA-2017-118857	15-04-2017	18-04-2017	First Class	AH-10075	Adam Hart	Corporate
4	4983	CA-2014-160066	16-11-2014	22-11-2014	Standard Class	AH-10075	Adam Hart	Corporate
5	6044	CA-2017-145702	19-05-2017	24-05-2017	Second Class	AH-10075	Adam Hart	Corporate
6	6045	CA-2017-145702	19-05-2017	24-05-2017	Second Class	AH-10075	Adam Hart	Corporate
7	7086	CA-2017-112004	25-09-2017	28-09-2017	First Class	AH-10075	Adam Hart	Corporate
8	7087	CA-2017-112004	25-09-2017	28-09-2017	First Class	AH-10075	Adam Hart	Corporate
9	7755	CA-2015-161795	21-12-2015	23-12-2015	Second Class	AH-10075	Adam Hart	Corporate
10	8414	CA-2016-147109	17-12-2016	21-12-2016	Standard Class	AH-10075	Adam Hart	Corporate
11	8415	CA-2016-147109	17-12-2016	21-12-2016	Standard Class	AH-10075	Adam Hart	Corporate
12	8446	CA-2017-125451	23-10-2017	24-10-2017	First Class	AH-10075	Adam Hart	Corporate
13	8447	CA-2017-125451	23-10-2017	24-10-2017	First Class	AH-10075	Adam Hart	Corporate
14	8448	CA-2017-125451	23-10-2017	24-10-2017	First Class	AH-10075	Adam Hart	Corporate
15	8449	CA-2017-125451	23-10-2017	24-10-2017	First Class	AH-10075	Adam Hart	Corporate
16	8450	CA-2017-125451	23-10-2017	24-10-2017	First Class	AH-10075	Adam Hart	Corporate
17	8451	CA-2017-125451	23-10-2017	24-10-2017	First Class	AH-10075	Adam Hart	Corporate
18	8687	CA-2016-144015	26-06-2016	26-06-2016	Same Day	AH-10075	Adam Hart	Corporate
19	8688	CA-2016-144015	26-06-2016	26-06-2016	Same Day	AH-10075	Adam Hart	Corporate
20	8689	CA-2016-144015	26-06-2016	26-06-2016	Same Day	AH-10075	Adam Hart	Corporate

20. Click on “Close and Apply”.



21. To change the parameter value, click on “Edit parameter” from “Edit Query” icon.



22. Change the value and click on Ok.

Enter Parameters

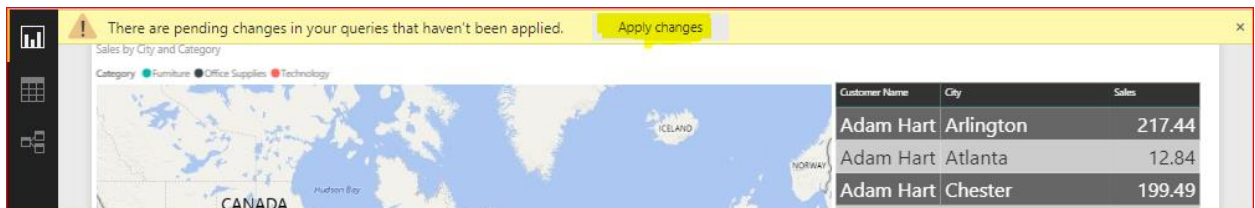
Customer

Alejandro Grove

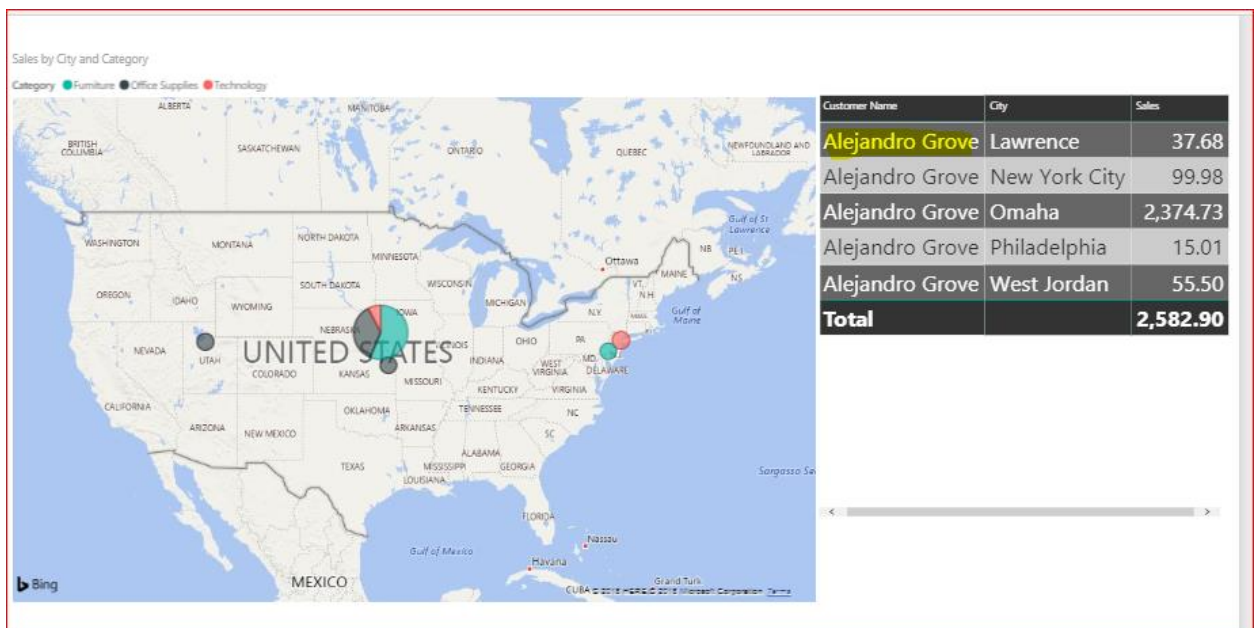
OK

Cancel

23. Click on “Apply changes”.

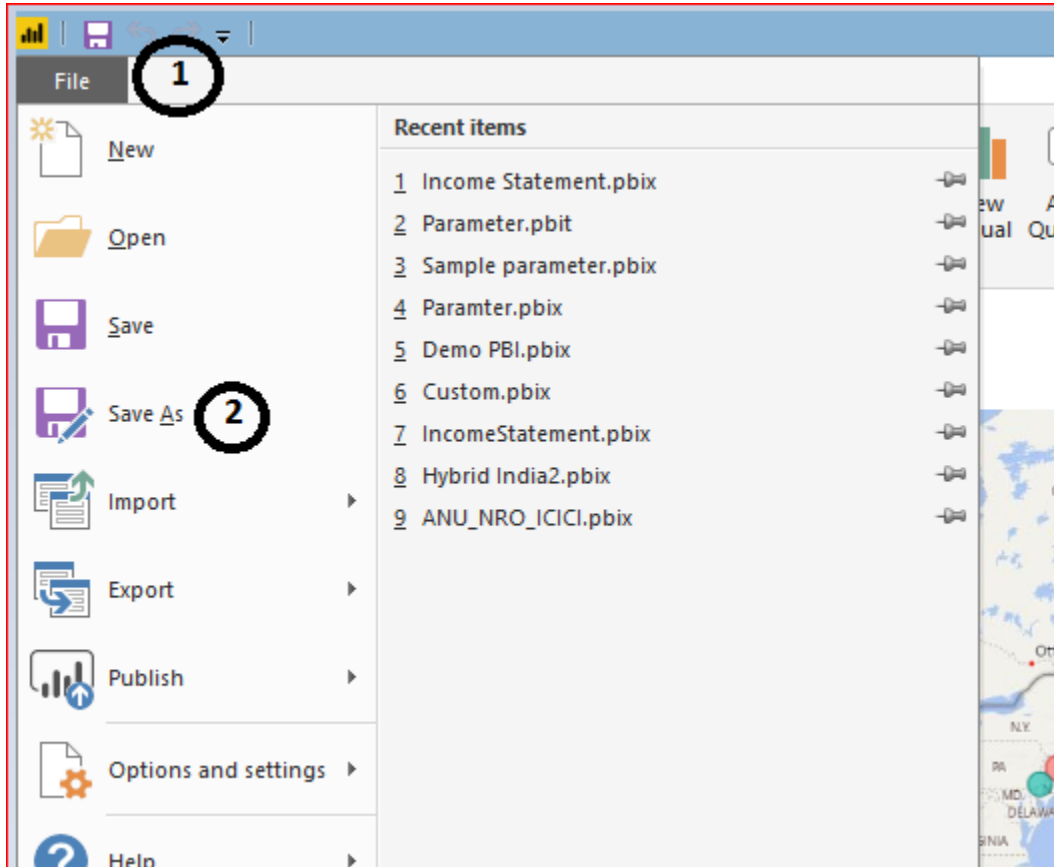


24. In this way, we can change the parameter value and check the result.

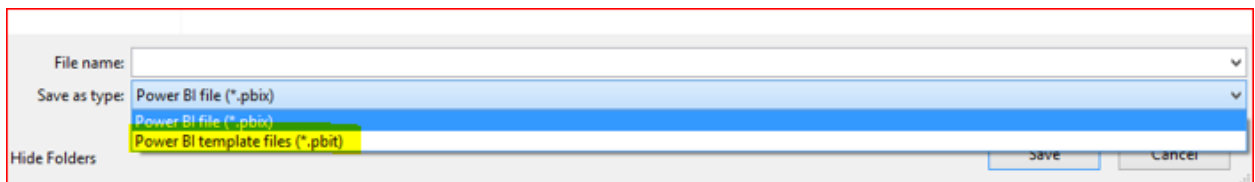


We can also make this parameter “dynamic” as follows:

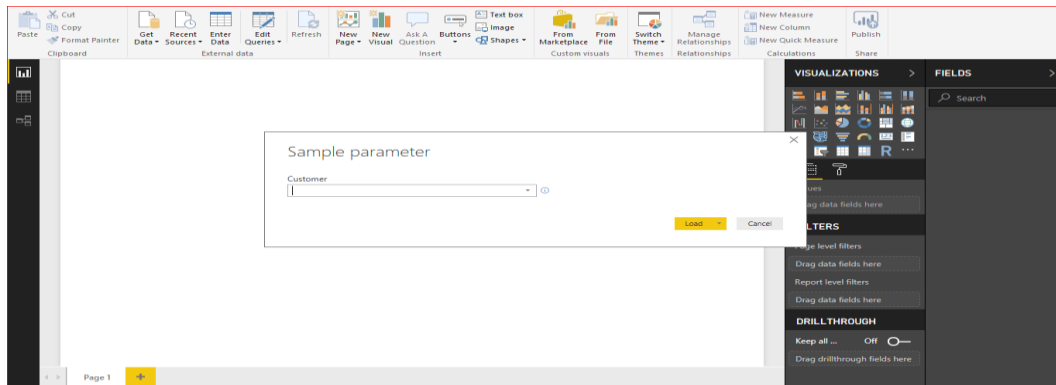
25. Click on “File” and select “Save As” option from dropdown.



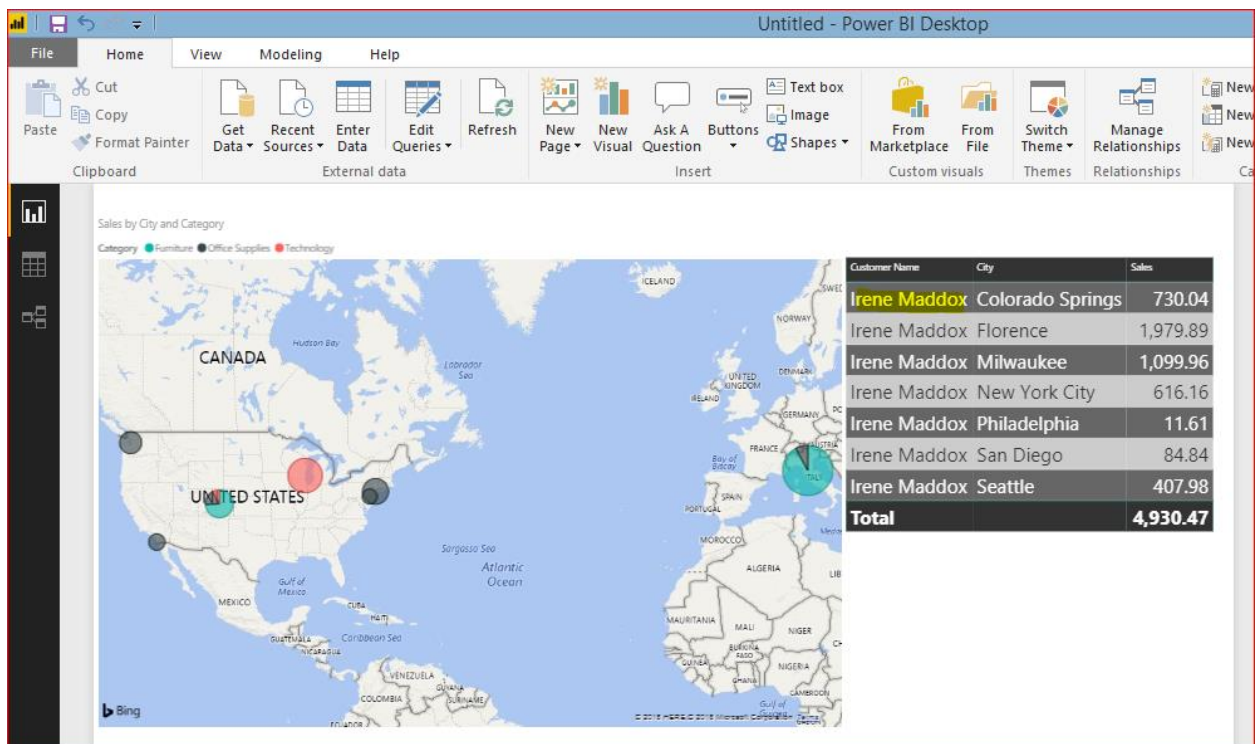
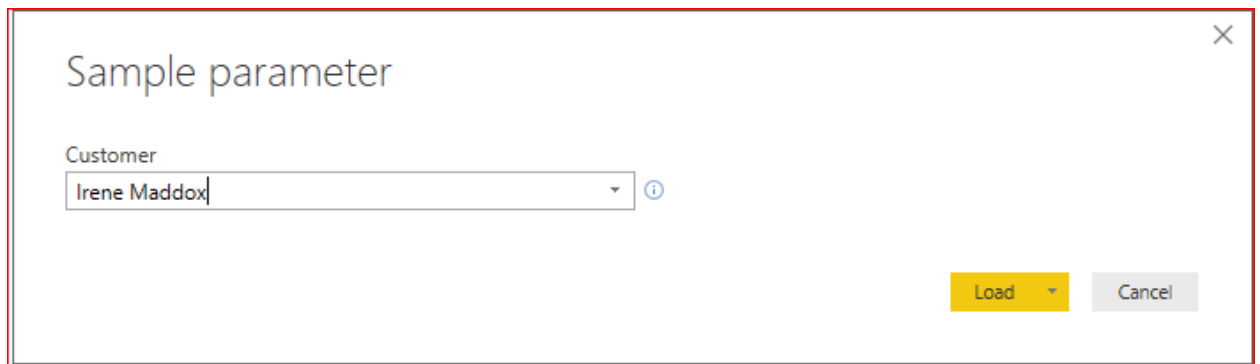
26. Select the format as “.pbit” and close the report.



27. Open the “.pbit” report and it will show pop up window for parameter.



28. Select the input value from drop-down list and it will show the result for same.



By following above steps, we can create input parameters for report in Power BI.