Ex05

Introduction: Power BI provides various transformation features. Some very straight forward, whereas there are few a bit challenging to use.

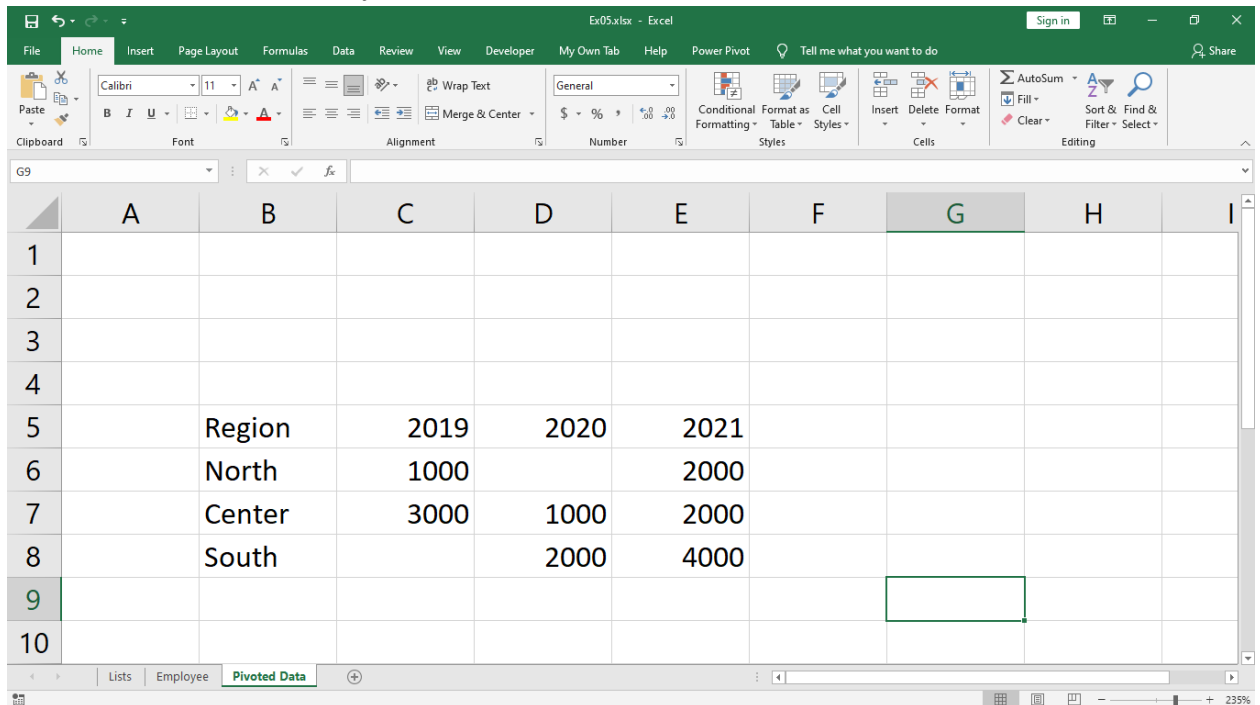**Objective:** Learn how to use Pivot & Unpivot Transformations.

Pre-requisites:

1) Understand how to load data from MS Excel
2) Basic transformation in Power BI.

Steps:

Part-1: Prepare Data Workbook

1. Copy from Ex04.xlsx and rename it as "Ex04.xlsx". We will extend the data set from Exercise 4.
2. From the workbook Ex05.xlsx just created, add a new worksheet "Pivoted Data" as below:
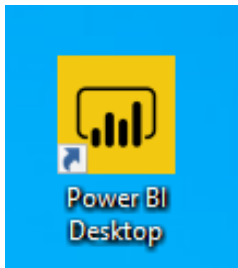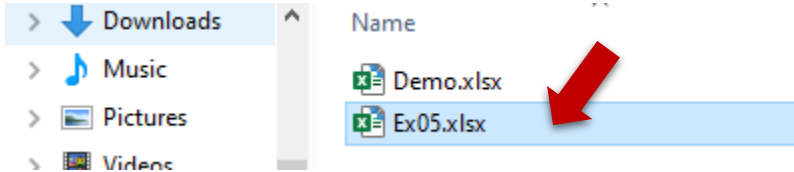

Part-2: To Unpivot Data

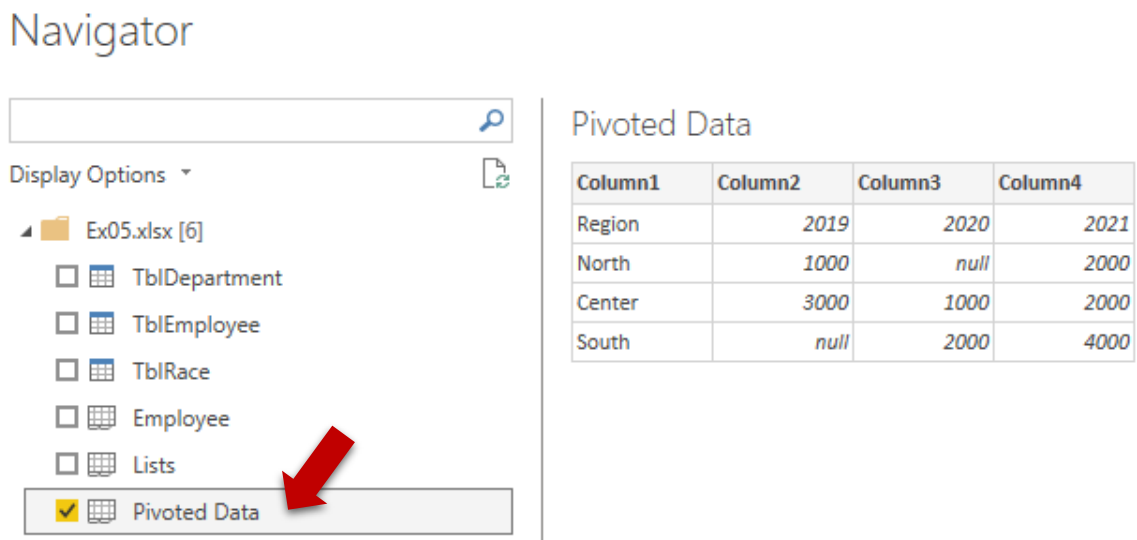3. Crate new Power BI project with name "Ex05.pbix".

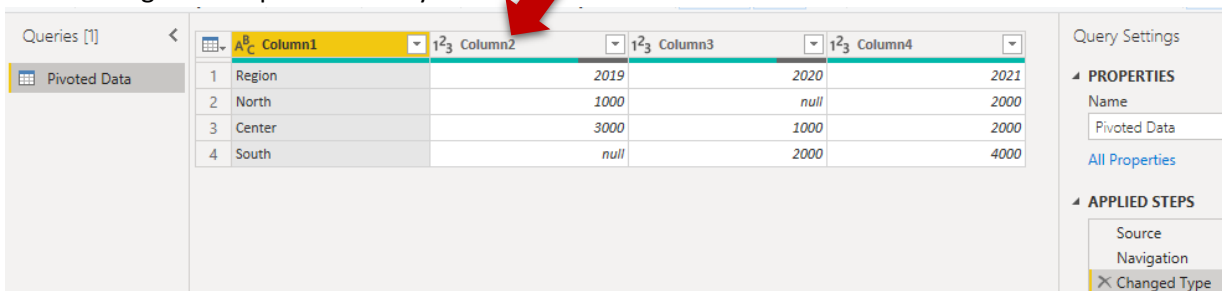4. From the main UI, select load Excel data source:
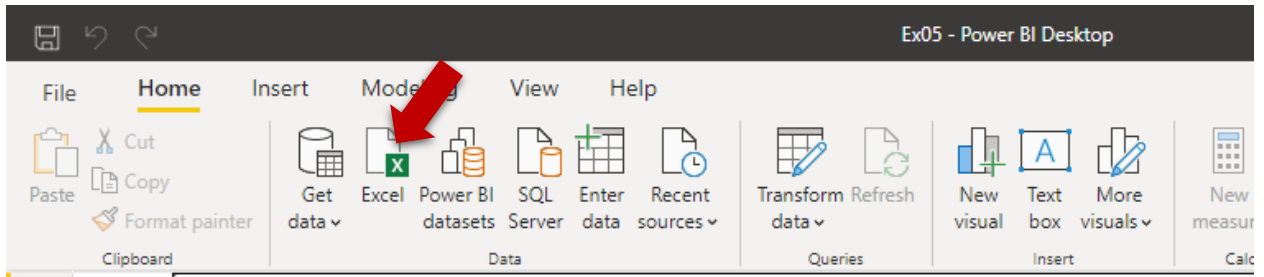
5. In the "Open" dialog box, select excel workbook "Ex03.xlsx" you just created:

6. From the "Navigator" dialog box, select worksheet "Pivoted Data" only. (Don't load at this moment):
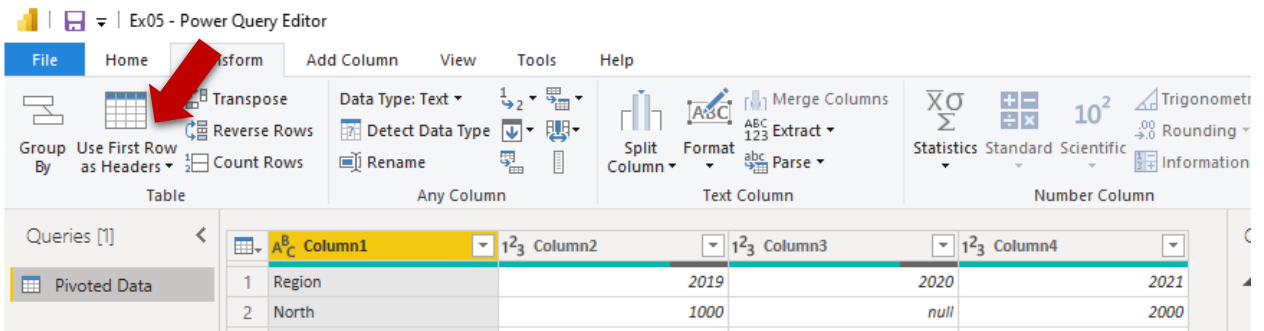

7. While still under "Navigator" dialog box, press the "Transform Data" button at the bottom right of the dialog box to open the Query Editor:

8. Beware that something not right about the header. This is due to the header seems fulfill the format of record, therefore Power BI mistaken it is a record. To overcome this problem, we need to promote the first row as header.

9. Under Query Editor, select the "Transform" ribbon Tab and select "Use First Row as Header" as shown below:

10. You show get the following result:

11. Now multi select columns from year 2019 to 2021 (Control-Click the column headers):

Region	2019	2020	2021
1 North	1000	null	2000
2 Center	3000	1000	2000
3 South	null	2000	4000

12. While selecting those columns, select "Unpivot Columns":
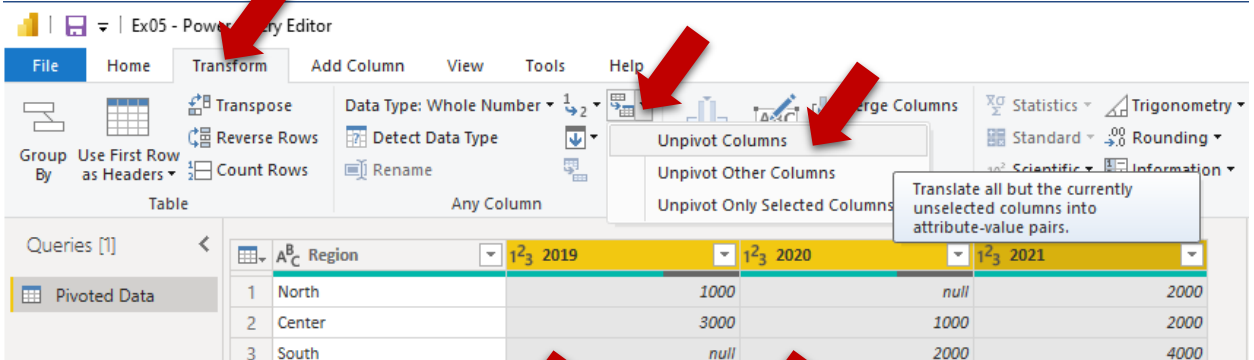
13. You should get the following result:

Region	Attribute	Value
1 North	2019	1000
2 North	2021	2000
3 Center	2019	3000
4 Center	2020	1000
5 Center	2021	2000
6 South	2020	2000
7 South	2021	4000

The generated columns with name "Attribute" and "Value" are by default. Why there are 7 records are generated?

14. Double click the generated column headers, rename them as following:

Part-3: To Pivot Data

15. Continue from the previous steps. At this point we should have a set of Unpivoted data. Now select "Year" column:

16. While the column is selected,

17. In the "Pivot Column" dialog box, make sure that the "Sales" is selected and press "OK" to complete:
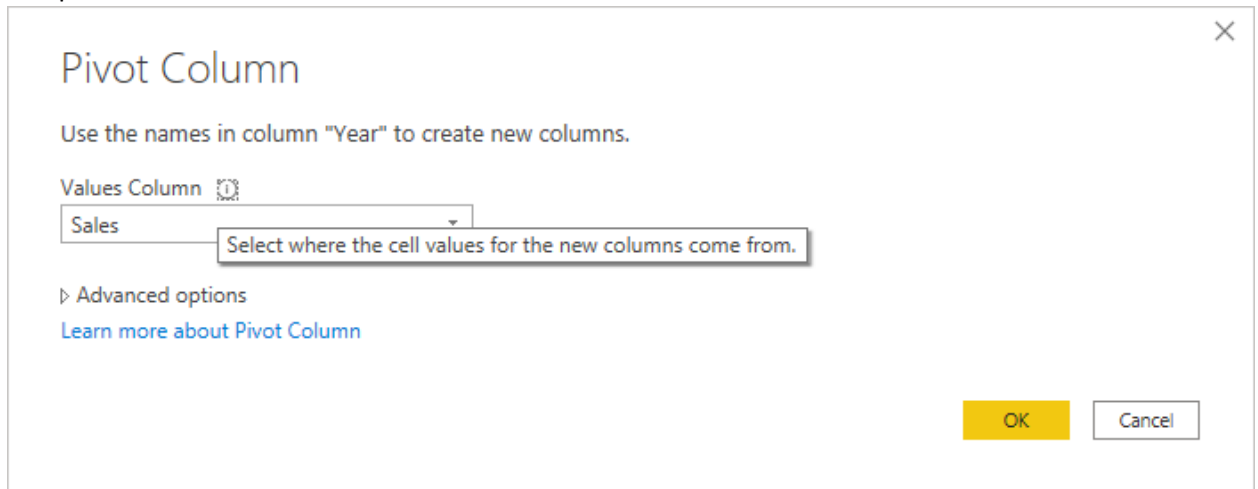
18. You should get the following result:

	ABC Region	123 2019	123 2021	123 2020
1	Center	3000	2000	1000
2	North	1000	2000	null
3	South	null	4000	2000

Now the data is in Pivoted form.

19. Close & Apply