**CREATE A MATRIX**

select matrix on the visualizations panel

click on the required column in the data panel and drag into values in visualization panel

**FORMAT MATRIX**

column header

values

border (if needed)

**CREATE A BARCHART**

Drill up/down

sort

spotlight

e.t.c

**CREATE A PIECHART**

add border

**CREATE A TABLE THAT WILL DEPICT THE TOTAL PRODUCT SOLD**

products sold vs total sales vs number of countries

**CREATE A MAP**

use countries as the values.

play around with the functions.

**CREATE A DONUT CHART**

show profit by each segment

**TREE MAP**

show the total amount of sales made by each product

**KEY COMPONENTS OF POWERBI**

* PowerBI desktop (development)
* PowerBI service (make reports online and share/make them available to different BU, anomaly detection, automation of reports, security)
* PowerBI mobile (viewing reports)
* PowerBI gateway
* PowerBI report server
* You must transform your data (if needed) before loading it into PowerBI
* After you are done with the report, you can always publish online to PowerBI server
* PowerBI server (didn’t practice that part, no data). Timestamp (1:10:10 – 1:17:00)

**CREATE RELATIONSHIP**

If two values/tables are not related, PowerBI won’t display the visual until they are connected/related.

Create a relationship between two unrelated tables/values, if needed.

**LOAD DATA AND TRANSFORM**

* In a case where the data available is not enough, we can create additional data on PowerBI.
* In the Home tab, click on “Enter data” to get started.
* Input the data in whichever way you want.
* After inputting the data, if you have any other modifications, you can click on the edit button. The Power Query Editor will be opened. It’s almost the same as the modifications that can be done in excel spreadsheet.
* Integer columns that require no computation can be changed to text.
* Filters can be applied to the columns if you want, there are different types of filters, use the one that goes with the task.
* Aggregated fields are fields that can be used for computation. For example, if it has summation **(∑)** sign at the beginning.

**filtering**

* Filtering can also be done in the table view. Filtering in table view is **not** **case sensitive.**
* Columns can also be split. For example, if a column contains some data/information that can be in another column for other usage, it can be split. The splitting can be based on delimiter or other conditions.
* Split columns can also be merged together. This can be done by clicking on the links, right click, select **merge columns.** Thedelimiter can also be included. There are different types of delimiters, there is also a custom delimiter where you can input the one you want.
* Using **group by:** it is used to create a new column based on a condition from other columns. Let’s say we want to know the sum of sales based on *ship mode* and *segment,* we’ll group the two columns together and select the condition (sum) and the column to use (sales)