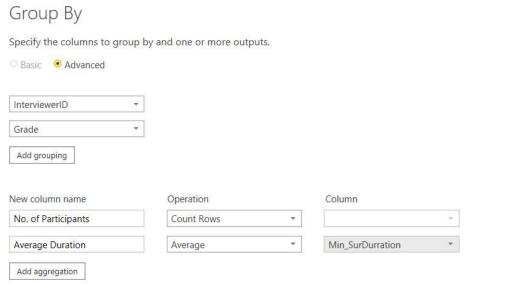
## Group By



- Available only in Transformation and Not Add Column
- Used to create aggregated data based on a categorical field
- In order to add multiple columns in the new table use Advanced Grouping



### Exercise – AW\_Product\_Fact



- Create a Table to show avg price for each Product SubCategory
- Create a table to show the number of product based on colours
- Create a table to show avg price and avg cost of each Product subcategory

# Pivoting and Unpivoting



- Used when data structure needs to be modified for better analysis
- Pivoting transforms row data into column
- Unpivoting transforms column data into row
- Pivoting and Unpivoting recognizes unique values unlike Transpose

				E	■,	A <sup>B</sup> C Age Group	▼ III Month	▼ A <sup>B</sup> <sub>C</sub> Attribute	▼ 1 <sup>2</sup> 3 Value	~
					1	15-20 y	01-01-	2017 Male		2235
-	A <sup>B</sup> C Age Group	▼ Month ▼	1 <sup>2</sup> <sub>3</sub> Male ▼	1 <sup>2</sup> <sub>3</sub> Fe	2	15-20 y	01-01-	2017 Female		2022
1	15-20 y	01-01-2017	2235		3	15-20 y	01-02-	2017 Male		3400
					4	15-20 y	01-02-	2017 Female		4628
2	15-20 y	01-02-2017	3400		5	15-20 y	01-03-	2017 Male		4970
3	15-20 y	01-03-2017	4970		6	15-20 y	01-03-	2017 Female		1003
4	15-20 y	01-04-2017	4500		7	15-20 y	01-04-	2017 Male		4500
5	21-25 y	01-01-2017	4039		8	15-20 y	01-04-	2017 Female		2363
6	21-25 y	01-02-2017	2792		9	21-25 y	01-01-	2017 Male		4039
7	21-25 y	01-03-2017	4765		10	21-25 y	01-01-	2017 Female		3501
8	21-25 y	01-04-2017	3127		11	21-25 y	01-02-	2017 Male		2792
					12	21-25 y	01-02-	2017 Female		3852
					13	21-25 y	01-03-	2017 Male		4765
					14	21-25 y	01-03-	2017 Female		4405
					15	21-25 y	01-04-	2017 Male		3127
					16	21-25 y	01-04-	2017 Female		2492

### Exercise



#### AW\_Product\_Fact

- a.Create a Discount Column 90% of the Price
- b.Round the columns with Price and cost

### AdventureWorks\_Sales\_2015-

- a. Find the total number of Unique products sold
- b.Find the total number of unique customers
- c. Find the Average Sales and Total Sales Value
- d.Find the day of the week the product was sold
- e.Create a col to classify the day of the week as weekday or weekend

### Merging Queries



- It works like Vlookup in excel where we are getting information from one table to another using a common column.
- It add columns to an existing table
- But it is better to create relationships and let the tables be separate
- This process may lead to creation of a lot of redundant data

### **Appending Queries**



- It adds rows to the existing table
- It is like Union of tables
- The tables we want to append should have the same structure and same data type
- If we have a folder in which all the files which we need to append are kept, we can choose Folder option from GET Data option. Using the Folder option the advantage is that if any file is added or removed it gets updated when the power BI file is refreshed.
- The tables used in the queries Merging or Appending can't be deleted as they are being used.

### Exercise



• Create a combined table for all the sales files