

DAY-15

SEPTEMBER-24,2025

DATASET:

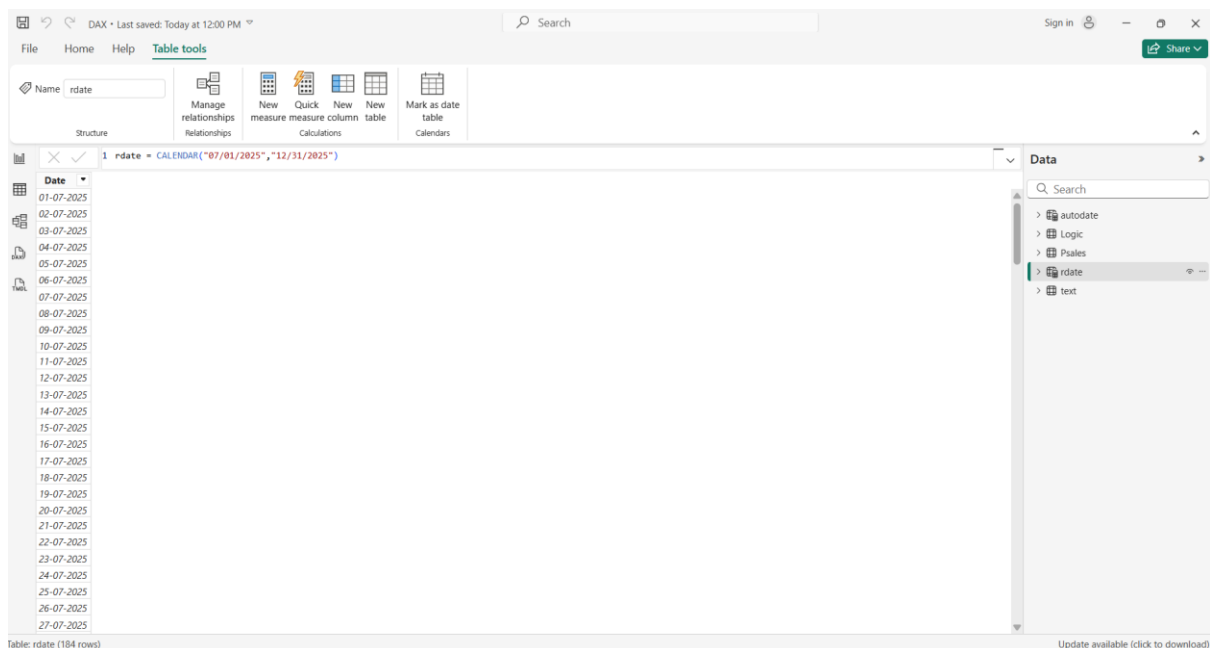
- Open a new power BI file, Go to Home tab and get data option in that navigate to the pizza sales data
- From the data import only the raw pizza sales table, change the table name to “psales”.

DAX:

DAX Measures:

1. Generating a table – When we don't know the number of outputs then we go with table DAX.

Table-1: rdate



Steps:

- To generate the DAX table we need go to the tab and select the new table option.
- In the formula bar write the formula to generate the table as required.
- Here, I generated the range of dates from second half of the year.

Formula:

rdate = CALENDAR("07/01/2025", "12/31/2025")

- The table with each day from July 1st to December 31st will be generated.

Table-2: autodate

The screenshot shows the Microsoft Power BI Desktop interface. The 'Table tools' ribbon is active, displaying options like 'Manage relationships', 'New measure', 'Quick measure', 'New table', 'New column', and 'Mark as date table'. A table named 'autodate' is selected, and its formula bar shows the formula '1 autodate = CALENDAR(AUTO())'. The table view shows a list of dates from 01-01-2023 to 27-01-2023. The 'Data' pane on the right shows the table structure with columns for 'Date', 'Month', 'Day', 'Pizza_Code', 'Pizza_Name', 'Category', 'Sales', 'Price_USD', 'cl', 'c2', 'c3', 'nt', 'C5', and 'Column'.

Steps:

- In the formula bar write the formula to generate the table as required.
- Formula: autodate = CALENDAR(AUTO())
- The formula helps us to generate the dates automatically, result is the table containing each day of the year.

2. Generating a column – When we want to generate or calculate for every row in the table then we go with the DAX column.

Date	Month	Day	Pizza_Code	Pizza_Name	Category	Sales	Price_USD	cl	c2	c3	nt	C5	Column
01 January 2023	January	Sunday	3	Farmhouse	Veg	103	7	1	January	2	855	01-01-2023 12:00:00 AM	01-01-2022 12:00:00 AM
01 January 2023	January	Sunday	5	Double Cheese	Veg	68	10	1	January	2	855	01-02-2023 12:00:00 AM	01-01-2022 12:00:00 AM
01 January 2023	January	Sunday	4	Deluxe	Non-Veg	61	15	1	January	2	855	01-02-2023 12:00:00 AM	01-01-2022 12:00:00 AM
01 January 2023	January	Sunday	3	Farmhouse	Veg	114	7	1	January	2	855	01-02-2023 12:00:00 AM	01-01-2022 12:00:00 AM
01 January 2023	January	Sunday	3	Farmhouse	Veg	67	7	1	January	2	855	01-02-2023 12:00:00 AM	01-01-2022 12:00:00 AM
02 January 2023	January	Monday	5	Double Cheese	Veg	91	10	1	January	2	855	02-02-2023 12:00:00 AM	02-01-2022 12:00:00 AM
02 January 2023	January	Monday	5	Double Cheese	Veg	103	10	1	January	2	855	02-02-2023 12:00:00 AM	02-01-2022 12:00:00 AM
02 January 2023	January	Monday	4	Deluxe	Non-Veg	133	15	1	January	2	855	02-02-2023 12:00:00 AM	02-01-2022 12:00:00 AM
03 January 2023	January	Tuesday	3	Farmhouse	Veg	87	7	1	January	2	854	03-02-2023 12:00:00 AM	03-01-2022 12:00:00 AM
03 January 2023	January	Tuesday	3	Farmhouse	Veg	82	7	1	January	2	854	03-02-2023 12:00:00 AM	03-01-2022 12:00:00 AM
03 January 2023	January	Tuesday	5	Double Cheese	Veg	93	10	1	January	2	854	03-02-2023 12:00:00 AM	03-01-2022 12:00:00 AM
03 January 2023	January	Tuesday	2	Chicago	Non-Veg	150	20	1	January	2	854	03-02-2023 12:00:00 AM	03-01-2022 12:00:00 AM
04 January 2023	January	Wednesday	3	Farmhouse	Veg	129	7	1	January	2	853	04-02-2023 12:00:00 AM	04-01-2022 12:00:00 AM
04 January 2023	January	Wednesday	3	Farmhouse	Veg	68	7	1	January	2	853	04-02-2023 12:00:00 AM	04-01-2022 12:00:00 AM
05 January 2023	January	Thursday	2	Chicago	Non-Veg	81	20	1	January	2	852	05-02-2023 12:00:00 AM	05-01-2022 12:00:00 AM
05 January 2023	January	Thursday	1	Margherita	Veg	81	25	1	January	2	852	05-02-2023 12:00:00 AM	05-01-2022 12:00:00 AM
05 January 2023	January	Thursday	2	Chicago	Non-Veg	51	20	1	January	2	852	05-02-2023 12:00:00 AM	05-01-2022 12:00:00 AM

Steps:

- In our psales data table we have the date column now if we want to generate the month from the full date present, we will be using the formula.
- Formula: `c1 = MONTH(Psales[Date])`
- With the same formula we can generate year also.
- We can change the format from numeric to the full month format using the formula.
- Formula: `c2 = FORMAT(Psales[Date],"mmmm")`
- If we want short format of the month we can use “mmm” instead of “mmmm”.
- Now if we need to calculate the date difference between two dates we will be using the date difference function.
- Here I am calculating from date in our psales data to the today’s date, the format we can display in month or year or quarters or weeks etc, we need to specify it in the end.
- Formula: `c3 = DATEDIFF(Psales[Date],TODAY(),YEAR)`
- In the next case I want to generate the working days between the dates then we go with below formula.
- Formula: `nt = NETWORKDAYS(Psales[Date],TODAY(),11)`
- Network days function helps to generate the working days between the range specified, at the end of the formula we have to give the number associated with the weekend.

	Weekend number values indicate the following weekend days:	
	1 or omitted: Saturday, Sunday	
	2: Sunday, Monday	
	3: Monday, Tuesday	
	4: Tuesday, Wednesday	
	5: Wednesday, Thursday	
	6: Thursday, Friday	
	7: Friday, Saturday	
	11: Sunday only	
	12: Monday only	
	13: Tuesday only	
	14: Wednesday only	
	15: Thursday only	
	16: Friday only	
	17: Saturday only	

- In the existing table we have only date , now if we want to generate both date and time we use the below formula.
- Formula: `C5 = DATE(Psales[Date].[Year],2,Psales[Date].[Day])`
- Now if we want to generate the same dates in next year or previous year then we use the formula as below.
- Formula: `Column = EDATE(Psales[Date],-12)`
- Edate functions is used to generate the dates in the before or after year.

3. Generating a measure: Whenever we need to generate the single value then we go with DAX measure.

**20 November
2002**
dob

**24 September
2025**
today

**24-09-2025
13:21:55**
date_nd_time

Steps:

- When we need to generate the today's date then go to the table name in the data pane, click on three dots and navigate to new measure.
- In the formula bar give the formula `TODAY()` for generating today's date.
- Now we can see the measure in the data pane, take a card from the visualisation pane and pass the measure to see the value.
- We can change the format in the column tools to short date.
- To display the desired date we need to write the formula in the measure.
- Formula : `dob= "20-11-2002"`
- Take a card and pass the value to display it in the report view.
- To display both date and time we can use the function `NOW()`.

- Take a card and pass the value to display it.

Q: Calculate the total sales amount.

Steps:

- We don't have direct column for the total sales so we use the DAX measure.
- Go to the table from 3 dots generate a new measure.
- Formula: `tsa = SUMX(Logic,Logic[Sales]*Logic[Price_USD])`
- Pass the measure generated to the card to display it in the report.
- We can create a column to calculate amount for each product and then pass the sum of the column to the card, this also works.

Q: Calculate average sales amount.

Steps:

- We don't have direct column for the average sales so we use the DAX measure.
- `asa = AVERAGEX(Logic,Logic[Sales]*Logic[Price_USD])`
- pass the generated measure to the card to display it in the report.