

Advanced DAX - p1

- Revise the last lecture Concepts.
- Measure Table Vs Calculated Columns Vs Measures.
- Switch Function.
- IF with Average.
- Averagex & Sumx as an iterator Function.
- Text Function.
- Calendar Function.
- Date Function.
 - Year, Month, Day
 - Month Name, Quarter, Day Name.
 - EO Month, Date ADD, Date Diff.
- Calculate Functions.
- Filter Functions.
- Summarize Function.
- ALL Functions.
- Time Intelligence.

```
e IF(LogicalTest, ResultIfTrue,
[ResultIfFalse])
Checks whether a condition is met, and returns one
value if TRUE, and another value if FALSE.
```

IF

	Customer ID	Customer Region	Customer Age	Quantity Ordered	Price of Item	Sales	Sales Category
21	North		10	24	\$272	\$6,532	Low Sales
22	North		23	19	\$419	\$7,958	High Sales
23	South		56	30	\$34	\$1,012	Low Sales
24	East		38	12	\$485	\$5,816	High Sales
25	East		22	14	\$404	\$5,651	High Sales
26	West		22	7	\$459	\$3,215	Low Sales
27	West		58	28	\$297	\$8,314	Low Sales
28	East		11	15	\$238	\$3,575	Low Sales

AND LOGIC**OR LOGIC**

Cond1	Cond2	Result
T	T	T
T	F	F
F	T	F
F	F	F

Cond1	Cond2	Result
T	T	T
T	F	T
F	T	T
F	F	F

AND Logic

F
St1 && St2 && st3 && st4

T

OR Logic

St1 || St2 || st3 || st4

SWITCH

SWITCH - Evaluates an expression against a list of values and returns one of multiple possible expressions

=SWITCH(Expression, Value1, Result1, ..., [Else])

Any DAX expression that returns a single scalar value, evaluated multiples times.

Examples:

- Calendar[Month ID]
- 'Product Lookup'[category]

List of values produced by the expression, each paired with a result to return for rows/cases that match.

Examples:

=SWITCH(Calendar[Month ID],
1, "January",
2, "February")

Value returned if the expression doesn't match any value argument

For example:

In our dataset, we can use the Sales Value column and define three categories of sales: High, Medium and Low.

- If Sales Value <= 3000, the category will be "Low Sales".
- If Sales Value > 3000 and Sales Value <= 5000, the category will be "Medium Sales".
- If Sales Value > 5000, the category will be "High Sales".

TEXT FUNCTIONS

LEN	Returns the number of characters in a string	=LEN(Text)
CONCATENATE	Joins two text strings into one	=CONCATENATE(Text1, Text2)
UPPER / LOWER	Converts a string to upper or lower case	=UPPER/LOWER (Text)
LEFT/ RIGHT/MID	Returns a number of characters from the start/middle/end of a text string	=LEFT/RIGHT(Text, [NumChars]) =MID(Text, StartPosition, NumChars)
SUBSTITUTE	Replaces an instance of existing text with new text in a string	=SUBSTITUTE(Text, OldText, NewText, [InstanceNumber])
SEARCH	Returns the position where a specified string or character is found, reading left to right	=SEARCH(FindText, WithinText, [StartPosition], [NotFoundValue])

BASIC DATE & TIME FUNCTIONS

TODAY/NOW	Returns the current date or exact time	=TODAY/NOW()
DAY/MONTH /YEAR	Returns the day of the month (1-31), month of the year (1-12), or year of a given date	=DAY/MONTH/YEAR(Date)
HOUR/MINUTE /SECOND	Returns the hour (0-23), minute (0-59), or second (0-59) of a given datetime value	=HOUR/MINUTE/SECOND(Datetime)
WEEKDAY/ WEEKNUM	Returns a weekday number from 1 (Sunday) to 7 (Saturday), or the week # of the year	=WEEKDAY/WEEKNUM(Date, [ReturnType])
EOMONTH	Returns the date of the last day of the month, +/- a specified number of months	=EOMONTH(StartDate, Months)
DATEDIFF	Returns the difference between two dates, based on a given interval (day, hour, year, etc.)	=DATEDIFF(Date1, Date2, Interval)

1 Target Customer = IF('Sales DAX'[Customer Age] < 20 || 'Sales DAX'[Customer Region] IN {"East", "West"}, "Not a Target Customer", "Target Customer")

Customer ID	Customer Region	Customer Age	Quantity Ordered	Price of Item	Sales	Sales Category	Target Customer
21	North	10	24	\$272	\$6,532	Low Sales	Not a Target Customer
22	North	23	19	\$419	\$7,958	High Sales	Target Customer
23	South	56	30	\$34	\$1,012	Low Sales	Target Customer
24	East	38	12	\$485	\$5,816	High Sales	Not a Target Customer
25	East	22	14	\$404	\$5,651	High Sales	Not a Target Customer
26	West	22	7	\$459	\$3,215	Low Sales	Not a Target Customer
27	West	58	28	\$297	\$8,314	Low Sales	Not a Target Customer
28	East	11	15	\$238	\$3,575	Low Sales	Not a Target Customer
29	East	43	5	\$1,492	\$7,459	Low Sales	Not a Target Customer
30	North	45	19	\$85	\$1,607	Low Sales	Target Customer
31	North	14	15	\$405	\$6,078	High Sales	Not a Target Customer
32	South	27	3	\$3,022	\$9,065	Low Sales	Target Customer
33	East	57	17	\$260	\$4,423	Low Sales	Not a Target Customer
34	East	17	26	\$33	\$850	Low Sales	Not a Target Customer
35	East	53	24	\$154	\$3,701	Low Sales	Not a Target Customer
36	East	59	3	\$1,958	\$5,873	Low Sales	Not a Target Customer
37	North	49	29	\$151	\$4,385	Low Sales	Target Customer
38	North	33	23	\$416	\$9,561	High Sales	Target Customer
39	South	38	10	\$232	\$2,322	Low Sales	Target Customer
40	East	59	12	\$407	\$4,881	High Sales	Not a Target Customer
41	North	18	4	\$1,539	\$6,154	Low Sales	Not a Target Customer
42	North	36	28	\$334	\$9,355	High Sales	Target Customer

=SWITCH(Expression, Value1, Result1, ..., [Else])

Table Or Column Name, TRUE()

Sales DAX

Sales Category (Nested If) = IF(['Sales DAX'[Sales] <= 3000, "Low Sales", IF(['Sales DAX'[Sales] <= 5000, "Medium Sales", "High Sales")])

Customer ID	Customer Region	Customer Age	Quantity Ordered	Price of Item	Sales	Sales Category	Target Customer	Sales Category (Nested If)
21	North	10	24	\$272	\$6,532	Low Sales	Not a Target Customer	High Sales
22	North	23	19	\$419	\$7,958	High Sales	Target Customer	High Sales
23	South	56	30	\$34	\$1,012	Low Sales	Target Customer	Low Sales
24	East	38	12	\$485	\$5,816	High Sales	Not a Target Customer	High Sales
25	East	22	14	\$404	\$5,651	High Sales	Not a Target Customer	High Sales
26	West	22	7	\$459	\$3,215	Low Sales	Not a Target Customer	Medium Sales
27	West	58	28	\$297	\$8,314	Low Sales	Not a Target Customer	High Sales
28	East	11	15	\$238	\$3,575	Low Sales	Not a Target Customer	Medium Sales
29	East	43	5	\$1,492	\$7,459	Low Sales	Not a Target Customer	High Sales
30	North	45	19	\$85	\$1,607	Low Sales	Target Customer	Low Sales
31	North	14	15	\$405	\$6,078	High Sales	Not a Target Customer	High Sales
32	South	27	3	\$3,022	\$9,065	Low Sales	Target Customer	High Sales
33	East	57	17	\$260	\$4,423	Low Sales	Not a Target Customer	Medium Sales
34	East	17	26	\$33	\$850	Low Sales	Not a Target Customer	Low Sales
35	East	53	24	\$154	\$3,701	Low Sales	Not a Target Customer	Medium Sales
36	East	59	3	\$1,958	\$5,873	Low Sales	Not a Target Customer	High Sales
37	North	49	29	\$151	\$4,385	Low Sales	Target Customer	Medium Sales
38	North	33	23	\$416	\$9,561	High Sales	Target Customer	High Sales
39	South	38	10	\$232	\$2,322	Low Sales	Target Customer	Low Sales

```

Sales Category (Nested If) =
IF('Sales DAX'[Sales] <= 3000 ,
    "Low Sales",
    IF('Sales DAX'[Sales] <= 5000 ,
        "Medium Sales",
        "High Sales")
)

```

Shift + Enter

to move the content to next line

ResultIfFalse

Sales Category(SWITCH) =

```

SWITCH(
    TRUE(),
    'Sales DAX'[Sales] <= 3000 , "Low Sales",
    'Sales DAX'[Sales] <= 5000 , "Medium Sales",
    'Sales DAX'[Sales] > 5000 , "High Sales"
)

```

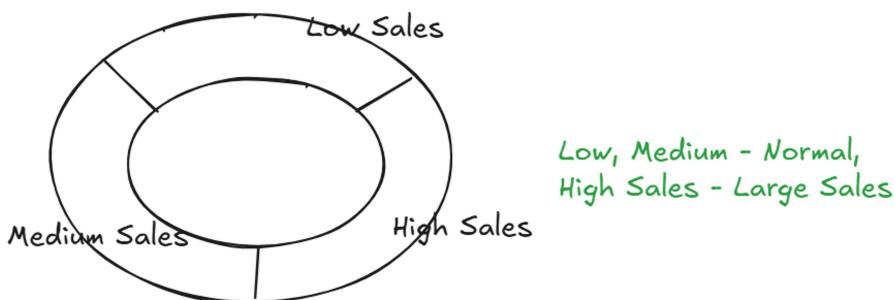
	Customer Region	Customer Age	Quantity Ordered	Price of Item	Sales	Sales Category	Target Customer	Sales Category (Nested If)	Sales Category(SWITCH)
1	North	10	24	\$272	\$6,532	Low Sales	Not a Target Customer	High Sales	High Sales
2	North	23	19	\$419	\$7,958	High Sales	Target Customer	High Sales	High Sales
3	South	56	30	\$34	\$1,012	Low Sales	Target Customer	Low Sales	Low Sales
4	East	38	12	\$485	\$5,816	High Sales	Not a Target Customer	High Sales	High Sales
5	East	22	14	\$404	\$5,651	High Sales	Not a Target Customer	High Sales	High Sales
6	West	22	7	\$459	\$3,215	Low Sales	Not a Target Customer	Medium Sales	Medium Sales
7	West	58	28	\$297	\$8,314	Low Sales	Not a Target Customer	High Sales	High Sales
8	East	11	15	\$238	\$3,575	Low Sales	Not a Target Customer	Medium Sales	Medium Sales
9	East	43	5	\$1,492	\$7,459	Low Sales	Not a Target Customer	High Sales	High Sales
0	North	45	19	\$85	\$1,607	Low Sales	Target Customer	Low Sales	Low Sales
1	North	14	15	\$405	\$6,078	High Sales	Not a Target Customer	High Sales	High Sales
2	South	27	3	\$3,022	\$9,065	Low Sales	Target Customer	High Sales	High Sales
3	East	57	17	\$260	\$4,423	Low Sales	Not a Target Customer	Medium Sales	Medium Sales
4	East	17	26	\$33	\$850	Low Sales	Not a Target Customer	Low Sales	Low Sales
5	East	53	24	\$154	\$3,701	Low Sales	Not a Target Customer	Medium Sales	Medium Sales
6	East	59	3	\$1,958	\$5,873	Low Sales	Not a Target Customer	High Sales	High Sales
7	North	49	29	\$151	\$4,385	Low Sales	Target Customer	Medium Sales	Medium Sales
8	North	33	23	\$416	\$9,561	High Sales	Target Customer	High Sales	High Sales

Sales Category(SWITCH) ▾

- High Sales
- High Sales
- Low Sales
- High Sales
- High Sales
- Medium Sales
- High Sales
- Medium Sales
- High Sales
- High Sales
- Low Sales
- High Sales
- High Sales
- High Sales
- Medium Sales

Use of Switch -
I'm reducing filters

3 Filters → 2 Filters



1 Sales Category (Switch Filter) =

```

2   SWITCH(
3     'Sales DAX'[Sales Category(SWITCH)],
4     "Low Sales", "Normal Sales",
5     "Medium Sales", "Normal Sales",
6     "High Sales", "Large Sales")

```

Region	Customer Age	Quantity Ordered	Price of Item	Sales	Sales Category	Target Customer	Sales Category (Nested If)	Sales Category(SWITCH)	Sales Category (Switch Filter)
10	24	\$272	\$6,532	Low Sales	Not a Target Customer	High Sales	High Sales	High Sales	Large Sales
23	19	\$419	\$7,958	High Sales	Target Customer	High Sales	High Sales	High Sales	Large Sales
56	30	\$34	\$1,012	Low Sales	Target Customer	Low Sales	Low Sales	Low Sales	Normal Sales
38	12	\$485	\$5,816	High Sales	Not a Target Customer	High Sales	High Sales	High Sales	Large Sales
22	14	\$404	\$5,651	High Sales	Not a Target Customer	High Sales	High Sales	High Sales	Large Sales
22	7	\$459	\$3,215	Low Sales	Not a Target Customer	Medium Sales	Medium Sales	Medium Sales	Normal Sales
58	28	\$297	\$8,314	Low Sales	Not a Target Customer	High Sales	High Sales	High Sales	Large Sales
11	15	\$238	\$3,575	Low Sales	Not a Target Customer	Medium Sales	Medium Sales	Medium Sales	Normal Sales
43	5	\$1,492	\$7,459	Low Sales	Not a Target Customer	High Sales	High Sales	High Sales	Large Sales
45	19	\$85	\$1,607	Low Sales	Target Customer	Low Sales	Low Sales	Low Sales	Normal Sales
14	15	\$405	\$6,078	High Sales	Not a Target Customer	High Sales	High Sales	High Sales	Large Sales
27	3	\$3,022	\$9,065	Low Sales	Target Customer	High Sales	High Sales	High Sales	Large Sales
57	17	\$260	\$4,423	Low Sales	Not a Target Customer	Medium Sales	Medium Sales	Medium Sales	Normal Sales
17	26	\$33	\$850	Low Sales	Not a Target Customer	Low Sales	Low Sales	Low Sales	Normal Sales
53	24	\$154	\$3,701	Low Sales	Not a Target Customer	Medium Sales	Medium Sales	Medium Sales	Normal Sales
59	3	\$1,958	\$5,873	Low Sales	Not a Target Customer	High Sales	High Sales	High Sales	Large Sales
49	29	\$151	\$4,385	Low Sales	Target Customer	Medium Sales	Medium Sales	Medium Sales	Normal Sales
37	23	\$416	\$9,561	High Sales	Target Customer	High Sales	High Sales	High Sales	Large Sales

IF With Average

What if price of an item is Greater than 1000, Average price, Else the same price.

IF(salesprice > 1000 , AVG(price), same amount)

1 Discount Price of Item =

```

2   IF('Sales DAX'[Price of Item] > 1000,
3     AVERAGE('Sales DAX'[Price of Item]),
4     'Sales DAX'[Price of Item])

```

Item	Price of Item	Sales	Sales Category	Target Customer	Sales Category (Nested If)	Sales Category(SWITCH)	Sales Category (Switch Filter)	Discount Price of Item
24	\$272	\$6,532	Low Sales	Not a Target Customer	High Sales	High Sales	Large Sales	\$272
19	\$419	\$7,958	High Sales	Target Customer	High Sales	High Sales	Large Sales	\$419
30	\$34	\$1,012	Low Sales	Target Customer	Low Sales	Low Sales	Normal Sales	\$34
12	\$485	\$5,816	High Sales	Not a Target Customer	High Sales	High Sales	Large Sales	\$485
14	\$404	\$5,651	High Sales	Not a Target Customer	High Sales	High Sales	Large Sales	\$404
7	\$459	\$3,215	Low Sales	Not a Target Customer	Medium Sales	Medium Sales	Normal Sales	\$459
28	\$297	\$8,314	Low Sales	Not a Target Customer	High Sales	High Sales	Large Sales	\$297
15	\$238	\$3,575	Low Sales	Not a Target Customer	Medium Sales	Medium Sales	Normal Sales	\$238
5	\$1,492	\$7,459	Low Sales	Not a Target Customer	High Sales	High Sales	Large Sales	\$553
19	\$85	\$1,607	Low Sales	Target Customer	Low Sales	Low Sales	Normal Sales	\$85
15	\$405	\$6,078	High Sales	Not a Target Customer	High Sales	High Sales	Large Sales	\$405
3	\$3,022	\$9,065	Low Sales	Target Customer	High Sales	High Sales	Large Sales	\$553
17	\$260	\$4,423	Low Sales	Not a Target Customer	Medium Sales	Medium Sales	Normal Sales	\$260
26	\$33	\$850	Low Sales	Not a Target Customer	Low Sales	Low Sales	Normal Sales	\$33
24	\$154	\$3,701	Low Sales	Not a Target Customer	Medium Sales	Medium Sales	Normal Sales	\$154
3	\$1,958	\$5,873	Low Sales	Not a Target Customer	High Sales	High Sales	Large Sales	\$553
29	\$151	\$4,385	Low Sales	Target Customer	Medium Sales	Medium Sales	Normal Sales	\$151
23	\$416	\$9,561	High Sales	Target Customer	High Sales	High Sales	Large Sales	\$416
10	\$232	\$2,322	Low Sales	Target Customer	Low Sales	Low Sales	Normal Sales	\$232
12	\$407	\$4,881	High Sales	Not a Target Customer	Medium Sales	Medium Sales	Normal Sales	\$407
4	\$1,539	\$6,154	Low Sales	Not a Target Customer	High Sales	High Sales	Large Sales	\$553
28	\$334	\$9,355	High Sales	Target Customer	High Sales	High Sales	Large Sales	\$334
21	\$133	\$1,136	Low Sales	Target Customer	Low Sales	Low Sales	Normal Sales	\$133

price of Item -

< 200 - 5% Discount
>200 & <500 - 10% Discount
>500 & <1000 - 15% Discount
>1000 - 20% Discount

$$0.95 = 1 - 0.05$$

$$0.90 = 1 - 0.10$$

$$0.85 = 1 - 0.15$$

$$0.80 = 1 - 0.20$$

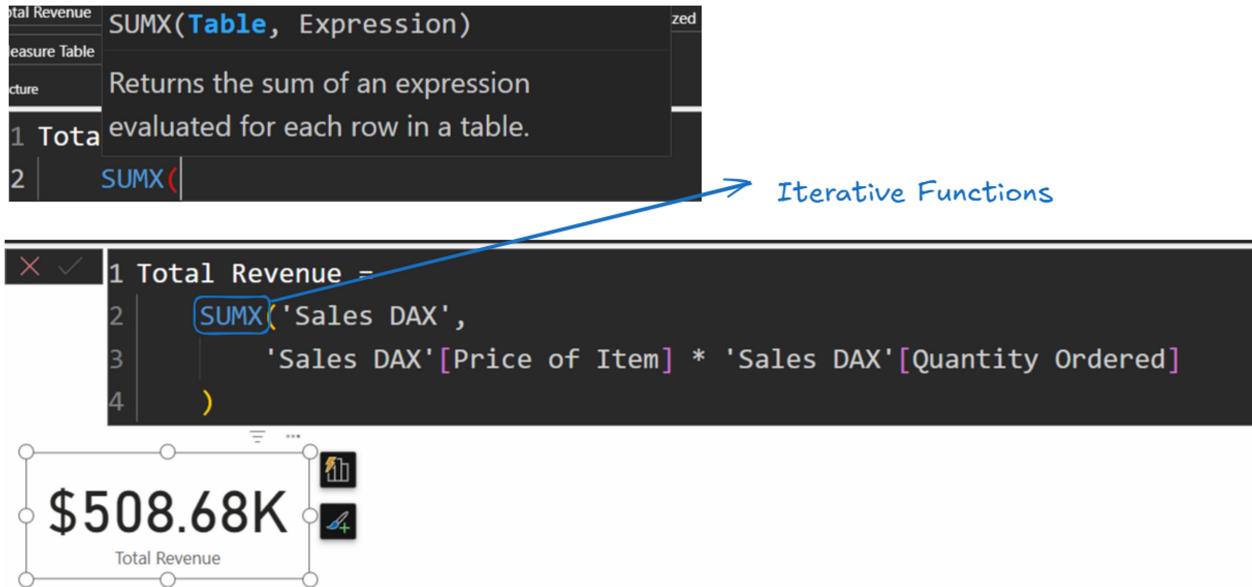
Discounted Price of Item =

```

1 Discounted Price of Item =
2     SWITCH(
3         TRUE(),
4             'Sales DAX'[Price of Item] <= 200 , 'Sales DAX'[Price of Item] * 0.95,
5             'Sales DAX'[Price of Item] <= 500 , 'Sales DAX'[Price of Item] * 0.90,
6             'Sales DAX'[Price of Item] <= 1000 , 'Sales DAX'[Price of Item] * 0.85,
7             'Sales DAX'[Price of Item] > 1000 , 'Sales DAX'[Price of Item] * 0.80)

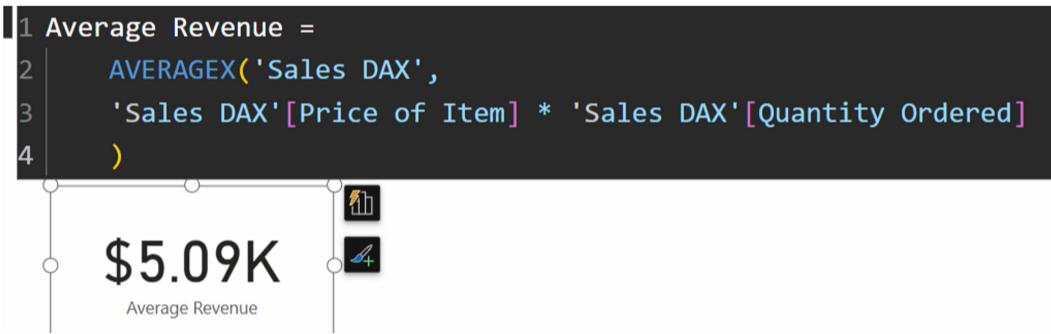
```

Item	Sales	Sales Category	Target Customer	Sales Category (Nested If)	Sales Category(SWITCH)	Sales Category (Switch Filter)	Discount Price of Item	Discounted Price of Item
\$272	\$6,532	Low Sales	Not a Target Customer	High Sales	High Sales	Large Sales	\$272	\$245
\$419	\$7,958	High Sales	Target Customer	High Sales	High Sales	Large Sales	\$419	\$377
\$34	\$1,012	Low Sales	Target Customer	Low Sales	Low Sales	Normal Sales	\$34	\$32
\$485	\$5,816	High Sales	Not a Target Customer	High Sales	High Sales	Large Sales	\$485	\$436
\$404	\$5,651	High Sales	Not a Target Customer	High Sales	High Sales	Large Sales	\$404	\$363
\$459	\$3,215	Low Sales	Not a Target Customer	Medium Sales	Medium Sales	Normal Sales	\$459	\$413
\$297	\$8,314	Low Sales	Not a Target Customer	High Sales	High Sales	Large Sales	\$297	\$267
\$238	\$3,575	Low Sales	Not a Target Customer	Medium Sales	Medium Sales	Normal Sales	\$238	\$215
\$1,492	\$7,459	Low Sales	Not a Target Customer	High Sales	High Sales	Large Sales	\$553	\$1,193
\$85	\$1,607	Low Sales	Target Customer	Low Sales	Low Sales	Normal Sales	\$85	\$80
\$405	\$6,078	High Sales	Not a Target Customer	High Sales	High Sales	Large Sales	\$405	\$365
\$3,022	\$9,065	Low Sales	Target Customer	High Sales	High Sales	Large Sales	\$553	\$2,417
\$260	\$4,423	Low Sales	Not a Target Customer	Medium Sales	Medium Sales	Normal Sales	\$260	\$234
\$33	\$850	Low Sales	Not a Target Customer	Low Sales	Low Sales	Normal Sales	\$33	\$31
\$154	\$3,701	Low Sales	Not a Target Customer	Medium Sales	Medium Sales	Normal Sales	\$154	\$146
\$1,958	\$5,873	Low Sales	Not a Target Customer	High Sales	High Sales	Large Sales	\$553	\$1,566
\$151	\$4,385	Low Sales	Target Customer	Medium Sales	Medium Sales	Normal Sales	\$151	\$144
\$416	\$9,561	High Sales	Target Customer	High Sales	High Sales	Large Sales	\$416	\$374



AverageX

Sunday [23rd]
9-11



Creating a New Table - Calendar Table

Get data Excel OneLake SQL Server Data

CALENDAR(StartDate, EndDate)

Returns a table with one column of all dates between StartDate and EndDate.

1 Calendar Table = CALENDAR(

1 Calendar Table = CALENDAR("01/01/2022", TODAY())

Name Date Format \$% Summarization Don't summarize

Data type Date \$ %

Date formats

- *14-03-2001 (Short Date)
- *14 March 2001 (Long Date)
- 14 March 2001 (dd mmmm yyyy)
- 14 March 2001 (d mmmm yyyy)
- Wednesday, 14 March, 2001 (dddd, d mmmm, yyyy)
- 14-03-2001 (dd-mm-yyyy)
- 14-03-01 (dd-mm-yy)
- 14-3-01 (d-m-yy)
- 14.3.01 (d.m.yy)
- 2001-03-14 (yyyy-mm-dd)
- 14-03-2001 (dd/mm/yyyy)
- March, 2001 (mmmm, yyyy)
- 2001-03 (yyyy-mm)
- 14 March (d mmmm)
- 01 (yy)
- 2001 (yyyy)

Structure

1 Calendar Table =

Date
01 January 2022
02 January 2022
03 January 2022
04 January 2022
05 January 2022
06 January 2022
07 January 2022
08 January 2022
09 January 2022
10 January 2022
11 January 2022
12 January 2022
13 January 2022
14 January 2022
15 January 2022
16 January 2022
17 January 2022
18 January 2022
19 January 2022
20 January 2022
21 January 2022
22 January 2022
23 January 2022

1 Year = YEAR('Calendar Table'[Date])

Month = MONTH('Calendar Table'[Date])

Day = DAY('Calendar Table'[Date])

1 MonthName = FORMAT(['Calendar Table'[Date], "MMMM"]

Year	Month	Day	MonthName
2022	1	1	January
2022	1	2	January

1 DayName = FORMAT('Calendar Table'[Date], "ddd")

Year	Month	Day	MonthName	ShortName	DayName
2022	1	1	January	Jan	Saturday
2022	1	2	January	Jan	Sunday

1 ShortDayName = FORMAT('Calendar Table'[Date], "ddd")

Year	Month	Day	MonthName	ShortName	DayName	ShortDayName
2022	1	1	January	Jan	Saturday	Sat
2022	1	2	January	Jan	Sunday	Sun
2022	1	3	January	Jan	Monday	Mon
2022	1	4	January	Jan	Tuesday	Tue

1 Weekday = WEEKDAY('Calendar Table'[Date], 1)

Year	Month	Day	MonthName	ShortName	DayName	Weekday
2022	1	1	January	Jan	Saturday	7
2022	1	2	January	Jan	Sunday	1
2022	1	3	January	Jan	Monday	2
2022	1	4	January	Jan	Tuesday	3
2022	1	5	January	Jan	Wednesday	4
2022	1	6	January	Jan	Thursday	5

Sun - 1 till Sat - 7

1 Weekday = WEEKDAY('Calendar Table'[Date], 2)

Year	Month	Day	MonthName	ShortName	DayName	Weekday
2022	1	1	January	Jan	Saturday	6
2022	1	2	January	Jan	Sunday	7
2022	1	3	January	Jan	Monday	1
2022	1	4	January	Jan	Tuesday	2
2022	1	5	January	Jan	Wednesday	3
2022	1	6	January	Jan	Thursday	4
2022	1	7	January	Jan	Friday	5
2022	1	8	January	Jan	Saturday	6
2022	1	9	January	Jan	Sunday	7

Mon - 1 till Sun - 7

1 Weekday = WEEKDAY('Calendar Table'[Date], 3)

Year	Month	Day	MonthName	ShortName	DayName	Weekday
2022	1	1	January	Jan	Saturday	5
2022	1	2	January	Jan	Sunday	6
2022	1	3	January	Jan	Monday	0
2022	1	4	January	Jan	Tuesday	1
2022	1	5	January	Jan	Wednesday	2
2022	1	6	January	Jan	Thursday	3
2022	1	7	January	Jan	Friday	4

Mon - 0 till Sun - 6

1 IsWeekend? = IF('Calendar Table'[Weekday] IN {6,7}, "Weekend" , "Weekday")

Year	Month	Day	MonthName	ShortName	DayName	Weekday	IsWeekend?
2022	1	1	January	Jan	Saturday	6	Weekend
2022	1	2	January	Jan	Sunday	7	Weekend
2022	1	3	January	Jan	Monday	1	Weekday
2022	1	4	January	Jan	Tuesday	2	Weekday
2022	1	5	January	Jan	Wednesday	3	Weekday
2022	1	6	January	Jan	Thursday	4	Weekday
2022	1	7	January	Jan	Friday	5	Weekday
2022	1	8	January	Jan	Saturday	6	Weekend
2022	1	9	January	Jan	Sunday	7	Weekend

Today = TODAY()

Year	Month	Day	MonthName	ShortName	DayName	Weekday	IsWeekend?	Today
2022	1	1	January	Jan	Saturday	6	Weekend	21-03-2025
2022	1	2	January	Jan	Sunday	7	Weekend	21-03-2025
2022	1	3	January	Jan	Monday	1	Weekday	21-03-2025
2022	1	4	January	Jan	Tuesday	2	Weekday	21-03-2025
2022	1	5	January	Jan	Wednesday	3	Weekday	21-03-2025
2022	1	6	January	Jan	Thursday	4	Weekday	21-03-2025
2022	1	7	January	Jan	Friday	5	Weekday	21-03-2025
2022	1	8	January	Jan	Saturday	6	Weekend	21-03-2025
2022	1	9	January	Jan	Sunday	7	Weekend	21-03-2025
2022	1	10	January	Jan	Monday	1	Weekday	21-03-2025
2022	1	11	January	Jan	Tuesday	2	Weekday	21-03-2025
2022	1	12	January	Jan	Wednesday	3	Weekday	21-03-2025
2022	1	13	January	Jan	Thursday	4	Weekday	21-03-2025

DateAdd = DATEADD('Calendar Table'[Date],6,MONTH)

Year	Month	Day	MonthName	ShortName	DayName	Weekday	IsWeekend?	Today	Now	DateAdd
2022	1	1	January	Jan	Saturday	6	Weekend	21-03-2025	21-03-2025 23:09:18	01-07-2022 00:00:00
2022	1	2	January	Jan	Sunday	7	Weekend	21-03-2025	21-03-2025 23:09:18	02-07-2022 00:00:00
2022	1	3	January	Jan	Monday	1	Weekday	21-03-2025	21-03-2025 23:09:18	03-07-2022 00:00:00
2022	1	4	January	Jan	Tuesday	2	Weekday	21-03-2025	21-03-2025 23:09:18	04-07-2022 00:00:00
2022	1	5	January	Jan	Wednesday	3	Weekday	21-03-2025	21-03-2025 23:09:18	05-07-2022 00:00:00
2022	1	6	January	Jan	Thursday	4	Weekday	21-03-2025	21-03-2025 23:09:18	06-07-2022 00:00:00
2022	1	7	January	Jan	Friday	5	Weekday	21-03-2025	21-03-2025 23:09:18	07-07-2022 00:00:00
2022	1	8	January	Jan	Saturday	6	Weekend	21-03-2025	21-03-2025 23:09:18	08-07-2022 00:00:00
2022	1	9	January	Jan	Sunday	7	Weekend	21-03-2025	21-03-2025 23:09:18	09-07-2022 00:00:00
2022	1	10	January	Jan	Monday	1	Weekday	21-03-2025	21-03-2025 23:09:18	10-07-2022 00:00:00
2022	1	11	January	Jan	Tuesday	2	Weekday	21-03-2025	21-03-2025 23:09:18	11-07-2022 00:00:00

DATEADD(Dates, NumberofIntervals, Interval)
Moves the given set of dates by a specified interval.

1 DateAdd = DATEADD(

Year, Month, Day, Month, fx ADDCOLUMNS

1 EO Month = EOMONTH('Calendar Table'[Date], -1)

Year	Month	Day	MonthName	Short	DayName	Weekday	IsWeekend?	Today	Now	DateAdd	EO Month
2022	1	1	January	Jan	Saturday	6	Weekend	21-03-2025	21-03-2025 23:15:42	01-03-2022	31-12-2021 00:00:00
2022	1	2	January	Jan	Sunday	7	Weekend	21-03-2025	21-03-2025 23:15:42	02-03-2022	31-12-2021 00:00:00
2022	1	3	January	Jan	Monday	1	Weekday	21-03-2025	21-03-2025 23:15:42	03-03-2022	31-12-2021 00:00:00
2022	1	4	January	Jan	Tuesday	2	Weekday	21-03-2025	21-03-2025 23:15:42	04-03-2022	31-12-2021 00:00:00
2022	1	5	January	Jan	Wednesday	3	Weekday	21-03-2025	21-03-2025 23:15:42	05-03-2022	31-12-2021 00:00:00
2022	1	6	January	Jan	Thursday	4	Weekday	21-03-2025	21-03-2025 23:15:42	06-03-2022	31-12-2021 00:00:00
2022	1	7	January	Jan	Friday	5	Weekday	21-03-2025	21-03-2025 23:15:42	07-03-2022	31-12-2021 00:00:00
2022	1	8	January	Jan	Saturday	6	Weekday	21-03-2025	21-03-2025 23:15:42	08-03-2022	31-12-2021 00:00:00
2022	1	9	January	Jan	Sunday	7	Weekend	21-03-2025	21-03-2025 23:15:42	09-03-2022	31-12-2021 00:00:00
2022	1	10	January	Jan	Monday	1	Weekday	21-03-2025	21-03-2025 23:15:42	10-03-2022	31-12-2021 00:00:00
2022	1	11	January	Jan	Tuesday	2	Weekday	21-03-2025	21-03-2025 23:15:42	11-03-2022	31-12-2021 00:00:00
2022	1	12	January	Jan	Wednesday	3	Weekday	21-03-2025	21-03-2025 23:15:42	12-03-2022	31-12-2021 00:00:00
2022	1	13	January	Jan	Thursday	4	Weekday	21-03-2025	21-03-2025 23:15:42	13-03-2022	31-12-2021 00:00:00
2022	1	14	January	Jan	Friday	5	Weekday	21-03-2025	21-03-2025 23:15:42	14-03-2022	31-12-2021 00:00:00

1 EO Month = EOMONTH('Calendar Table'[Date], -12)

Year	Month	Day	MonthName	Short	DayName	Weekday	IsWeekend?	Today	Now	DateAdd	EO Month
2022	1	1	January	Jan	Saturday	6	Weekend	21-03-2025	21-03-2025 23:17:35	01-03-2022	31-01-2021 00:00:00
2022	1	2	January	Jan	Sunday	7	Weekend	21-03-2025	21-03-2025 23:17:35	02-03-2022	31-01-2021 00:00:00
2022	1	3	January	Jan	Monday	1	Weekday	21-03-2025	21-03-2025 23:17:35	03-03-2022	31-01-2021 00:00:00
2022	1	4	January	Jan	Tuesday	2	Weekday	21-03-2025	21-03-2025 23:17:35	04-03-2022	31-01-2021 00:00:00
2022	1	5	January	Jan	Wednesday	3	Weekday	21-03-2025	21-03-2025 23:17:35	05-03-2022	31-01-2021 00:00:00
2022	1	6	January	Jan	Thursday	4	Weekday	21-03-2025	21-03-2025 23:17:35	06-03-2022	31-01-2021 00:00:00
2022	1	7	January	Jan	Friday	5	Weekday	21-03-2025	21-03-2025 23:17:35	07-03-2022	31-01-2021 00:00:00
2022	1	8	January	Jan	Saturday	6	Weekday	21-03-2025	21-03-2025 23:17:35	08-03-2022	31-01-2021 00:00:00

1 DATEDIFF = DATEDIFF('Calendar Table'[Date], 'Calendar Table'[Today], WEEK)

Year	Month	Day	MonthName	Short	DayName	Weekday	IsWeekend?	Today	Now	DateAdd	EO Month	DATEDIFF
2022	1	1	January	Jan	Saturday	6	Weekend	21-03-2025	21-03-2025 23:19:52	01-03-2022	31-01-2021 00:00:00	168
2022	1	2	January	Jan	Sunday	7	Weekend	21-03-2025	21-03-2025 23:19:52	02-03-2022	31-01-2021 00:00:00	167
2022	1	3	January	Jan	Monday	1	Weekday	21-03-2025	21-03-2025 23:19:52	03-03-2022	31-01-2021 00:00:00	167
2022	1	4	January	Jan	Tuesday	2	Weekday	21-03-2025	21-03-2025 23:19:52	04-03-2022	31-01-2021 00:00:00	167
2022	1	5	January	Jan	Wednesday	3	Weekday	21-03-2025	21-03-2025 23:19:52	05-03-2022	31-01-2021 00:00:00	167
2022	1	6	January	Jan	Thursday	4	Weekday	21-03-2025	21-03-2025 23:19:52	06-03-2022	31-01-2021 00:00:00	167
2022	1	7	January	Jan	Friday	5	Weekday	21-03-2025	21-03-2025 23:19:52	07-03-2022	31-01-2021 00:00:00	167
2022	1	8	January	Jan	Saturday	6	Weekday	21-03-2025	21-03-2025 23:19:52	08-03-2022	31-01-2021 00:00:00	167

1 DATEDIFF = DATEDIFF('Calendar Table'[Date], 'Calendar Table'[Today], WEEK)

Date	Year	Month	Day	MonthName	Short	DayName	Weekday	IsWeekend?	Today	Now	DateAdd	EO Month	DATEDIFF
01-01-2022	2022	1	1	January	Jan	Saturday	6	Weekend	21-03-2025	21-03-2025 23:19:52	01-03-2022	31-01-2021 00:00:00	168
02-01-2022	2022	1	2	January	Jan	Sunday	7	Weekend	21-03-2025	21-03-2025 23:19:52	02-03-2022	31-01-2021 00:00:00	167
03-01-2022	2022	1	3	January	Jan	Monday	1	Weekday	21-03-2025	21-03-2025 23:19:52	03-03-2022	31-01-2021 00:00:00	167
04-01-2022	2022	1	4	January	Jan	Tuesday	2	Weekday	21-03-2025	21-03-2025 23:19:52	04-03-2022	31-01-2021 00:00:00	167
05-01-2022	2022	1	5	January	Jan	Wednesday	3	Weekday	21-03-2025	21-03-2025 23:19:52	05-03-2022	31-01-2021 00:00:00	167
06-01-2022	2022	1	6	January	Jan	Thursday	4	Weekday	21-03-2025	21-03-2025 23:19:52	06-03-2022	31-01-2021 00:00:00	167
07-01-2022	2022	1	7	January	Jan	Friday	5	Weekday	21-03-2025	21-03-2025 23:19:52	07-03-2022	31-01-2021 00:00:00	167
08-01-2022	2022	1	8	January	Jan	Saturday	6	Weekday	21-03-2025	21-03-2025 23:19:52	08-03-2022	31-01-2021 00:00:00	167
09-01-2022	2022	1	9	January	Jan	Sunday	7	Weekend	21-03-2025	21-03-2025 23:19:52	09-03-2022	31-01-2021 00:00:00	166
10-01-2022	2022	1	10	January	Jan	Monday	1	Weekday	21-03-2025	21-03-2025 23:19:52	10-03-2022	31-01-2021 00:00:00	166
11-01-2022	2022	1	11	January	Jan	Tuesday	2	Weekday	21-03-2025	21-03-2025 23:19:52	11-03-2022	31-01-2021 00:00:00	166
12-01-2022	2022	1	12	January	Jan	Wednesday	3	Weekday	21-03-2025	21-03-2025 23:19:52	12-03-2022	31-01-2021 00:00:00	166
13-01-2022	2022	1	13	January	Jan	Thursday	4	Weekday	21-03-2025	21-03-2025 23:19:52	13-03-2022	31-01-2021 00:00:00	166
14-01-2022	2022	1	14	January	Jan	Friday	5	Weekday	21-03-2025	21-03-2025 23:19:52	14-03-2022	31-01-2021 00:00:00	166