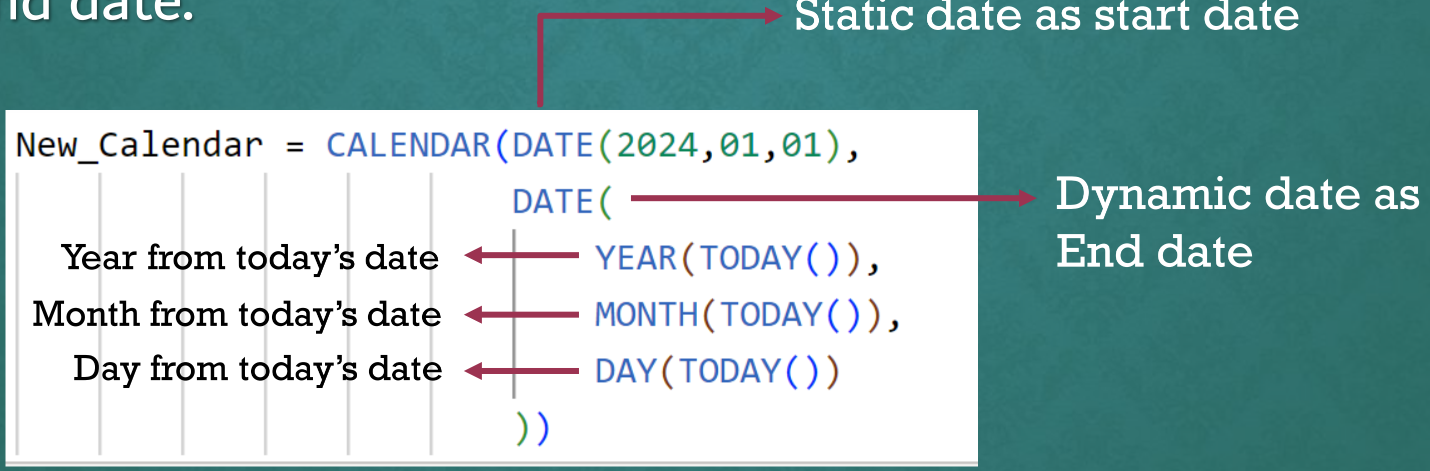
CALENDAR

- This function used to generate a set of dates in a data model.
- It returns a single column of continuous date from the given start date to the end date.



```
New_Calendar = CALENDAR(DATE(2024,01,01),
                        DATE(
                            YEAR(TODAY()),
                            MONTH(TODAY()),
                            DAY(TODAY())
                        ))
```

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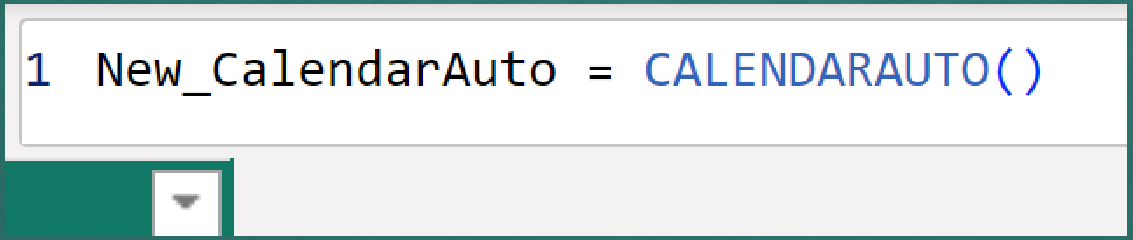
CALENDARAUTO

- This function also performs the same task as CALENDAR(), with significant difference of being its date range is calculated automatically based on the dates present in our model.
- Start date: It takes available minimum date as start date if the earliest date is not present in the column
- End date: It takes available maximum date as end date if the latest date is not present in the column



```
New_CalendarAuto = CALENDARAUTO()
```

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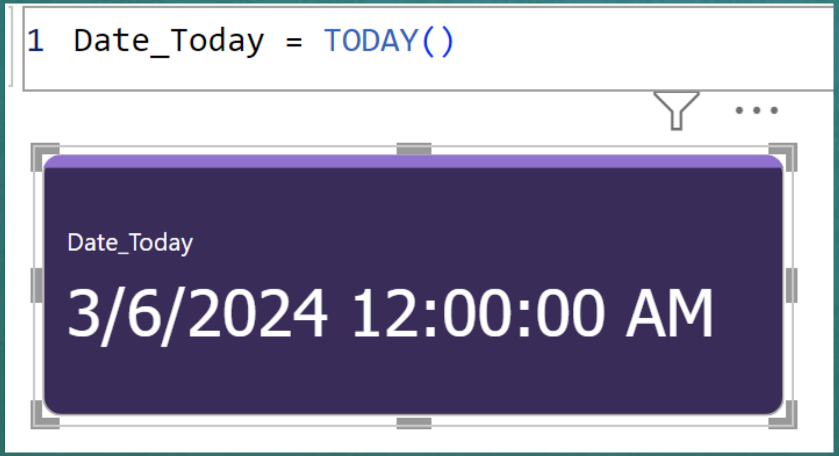
TODAY

- TODAY()
  - Returns the current date.
  - It returns the time value as 12.00 PM for all time



```
Date_Today = TODAY()
```

Date_Today

3/6/2024 12:00:00 AM

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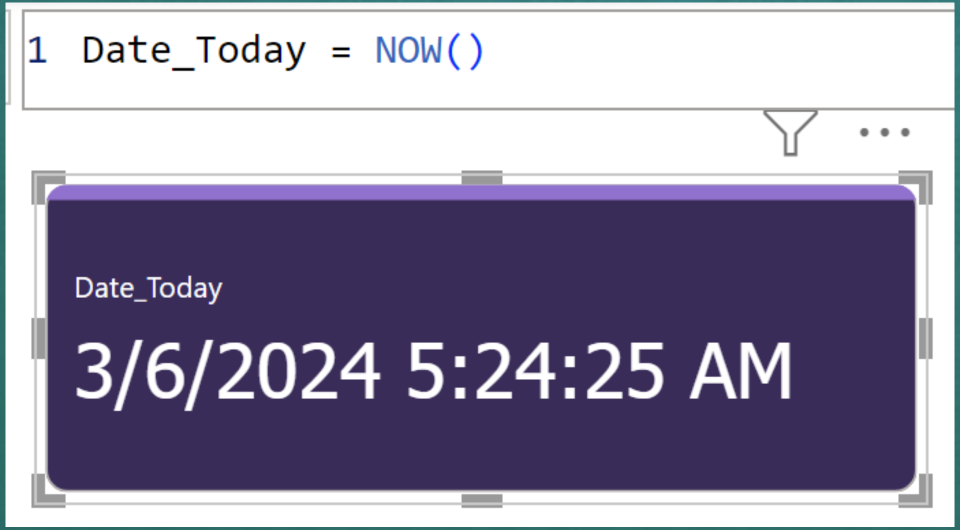
NOW

- NOW()
  - This also returns the current date.
  - Significant difference is it returns the exact time of the day.
  - And it follows UTC date time always.



```
Date_Today = NOW()
```

Date_Today

3/6/2024 5:24:25 AM

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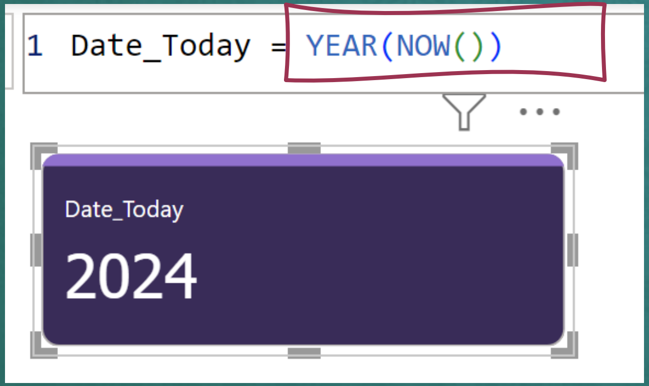
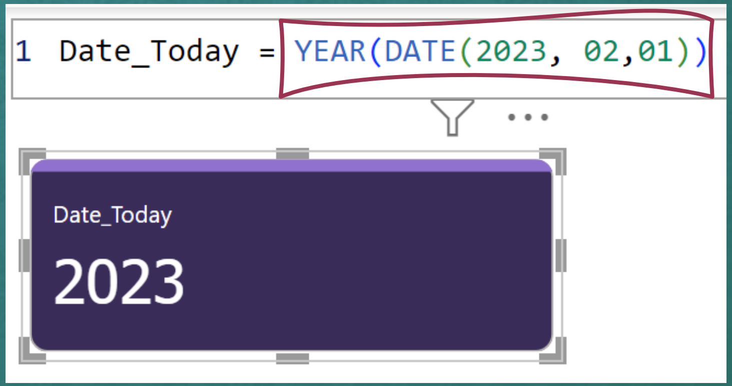
YEAR

- YEAR() Returns the year of given date.
- This accepts date as a parameter.



```
Date_Today = YEAR(NOW())
```

Date_Today
2024



```
Date_Today = YEAR(DATE(2023, 02,01))
```

Date_Today
2023

YEARFRAC

- YEARFRAC() is used to calculate the portion of the year has been passed between two given dates.
- It accepts 3 parameter such as start date, end date and basis.
- The parameter ‘basis’ indicates type of day count (0,1,2,3,4).
- The third parameter is optional, therefore it takes 0 and follows the 30/360 [US] standard.
- 1 - actual/actual
- 2 - actual/ 360
- 3 - actual/365
- 4 - 30/360 [European]

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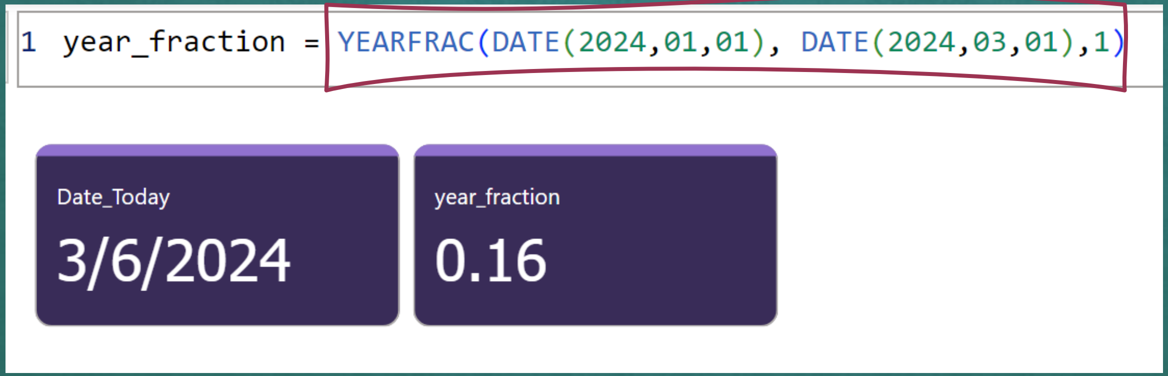
YEARFRAC

- Below code used basis as 1 and follows the actual standard.
- Fraction = actual days between given days/ actual days in the year
- = 61/366
- = 0.166



```
year_fraction = YEARFRAC(DATE(2024,01,01), DATE(2024,03,01),1)
```

Date_Today
3/6/2024

year_fraction
0.16

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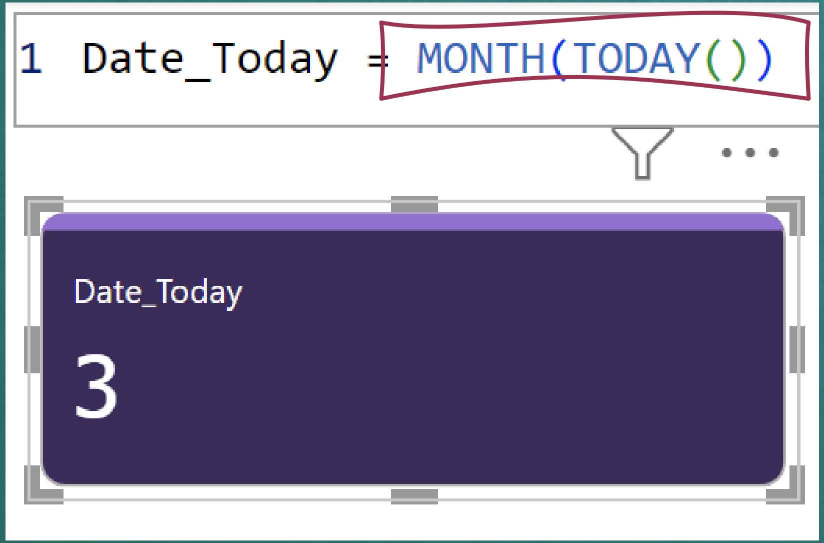
MONTH

- MONTH() Returns the month of given date.
- This requires date as a parameter and returns integer values as month number from 1 to 12.



```
Date_Today = MONTH(TODAY())
```

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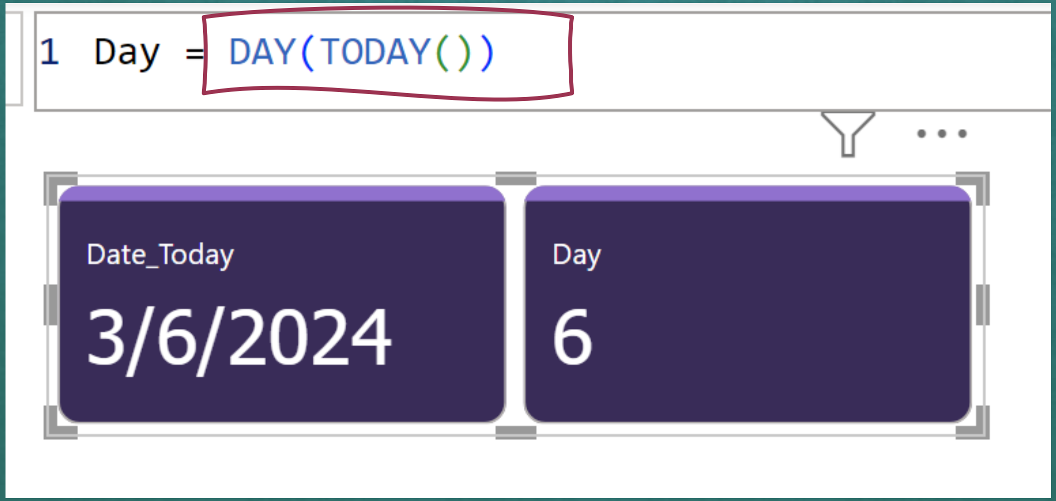
DAY

- DAY() Returns the day of given date.
- This requires date as a parameter and returns an integer, that indicating day of the month.



```
Day = DAY(TODAY())
```

Date_Today
3/6/2024

Day
6

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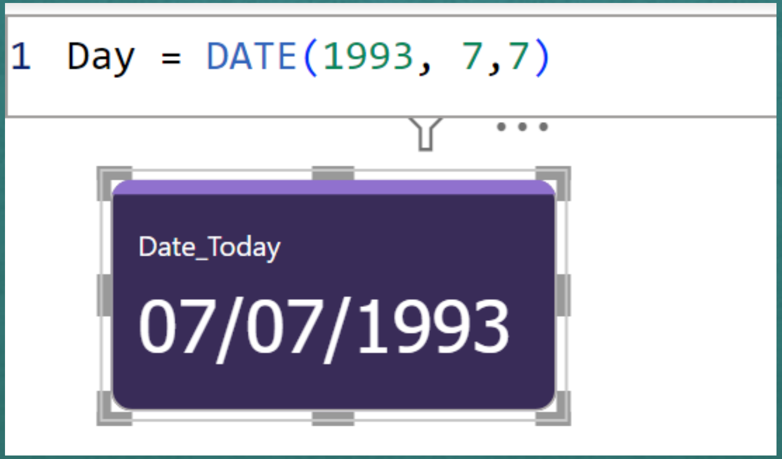
DATE

- DATE() function converts your integer inputs to corresponding date.
- It accepts 3 integer parameters and there is no optional parameters.



```
Day = DATE(1993, 7,7)
```

Date_Today

07/07/1993

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EDATE

- EDATE() function returns the date, that is indicated number of months before or after the provided start date.
- It accepts date as first parameter and integer as another parameter.
- In the example, used measure as date parameter and it returned the date after 5 months.
- Return value either positive or negative based the order of start and end date values.

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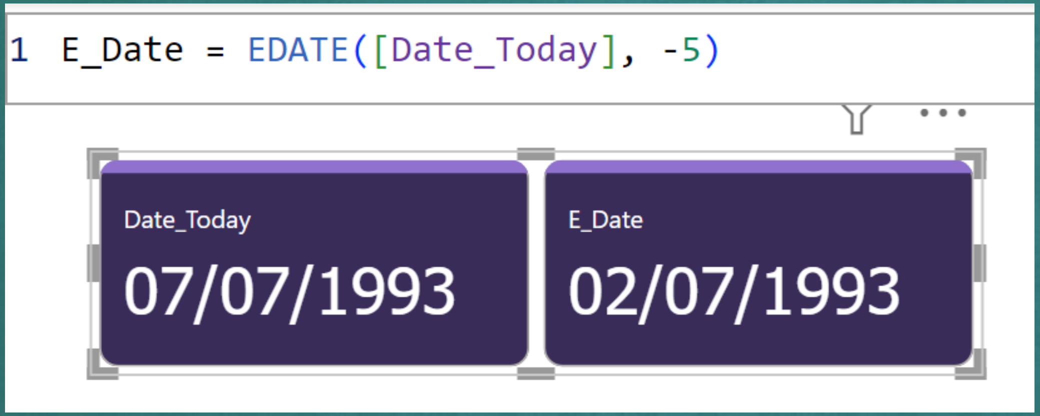
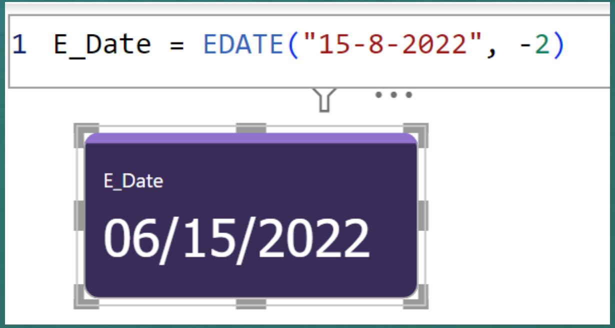
EDATE

- In the below example, it returned the date before 5 months.



```
E_Date = EDATE([Date_Today], -5)
```

- Here, I used a static date in the Date-Month-Year format and it returned 2 months earlier date.



```
E_Date = EDATE("15-8-2022", -2)
```

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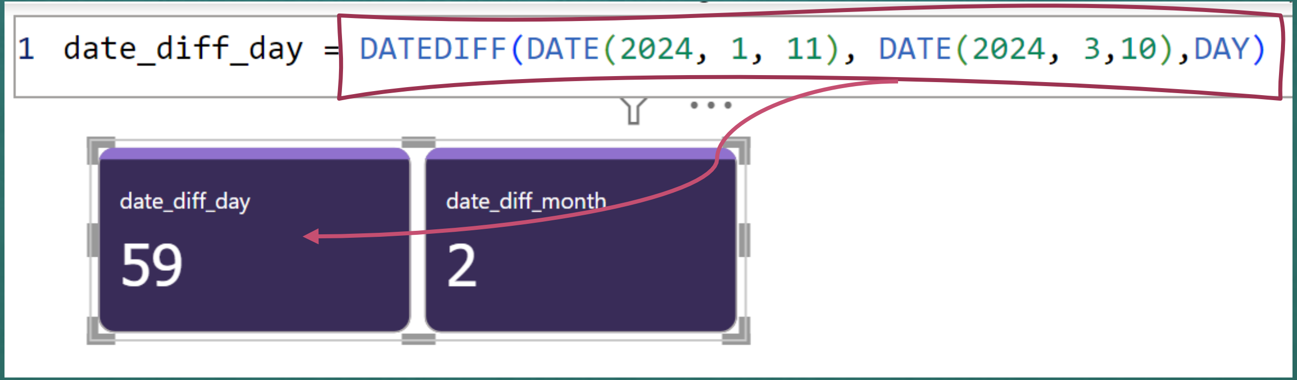
DATEDIFF

- DATEDIFF() function calculates the difference between two days.
- Can set the return value in various types such as year, quarter, month, week, day, hour.
- It accepts 3 parameter such as start date, end date and the interval.
- Below example, interval as day and returns the number of days in positive.



```
date_diff_day = DATEDIFF(DATE(2024, 1, 11), DATE(2024, 3,10),DAY)
```

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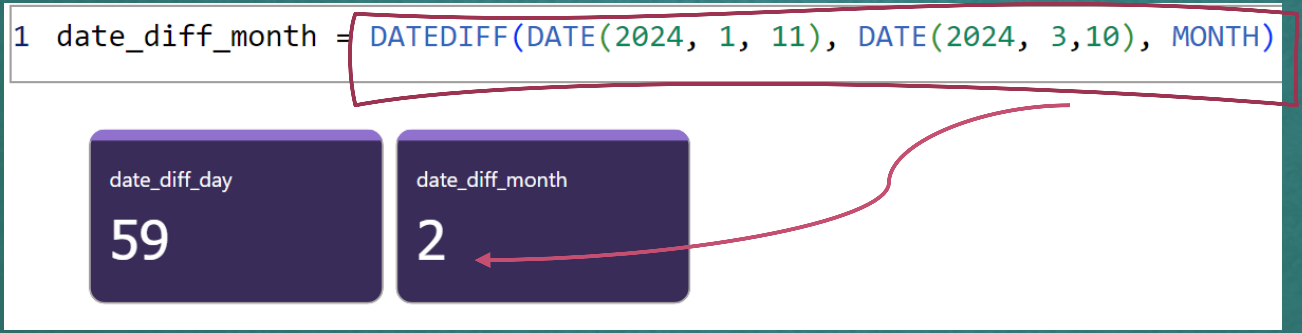
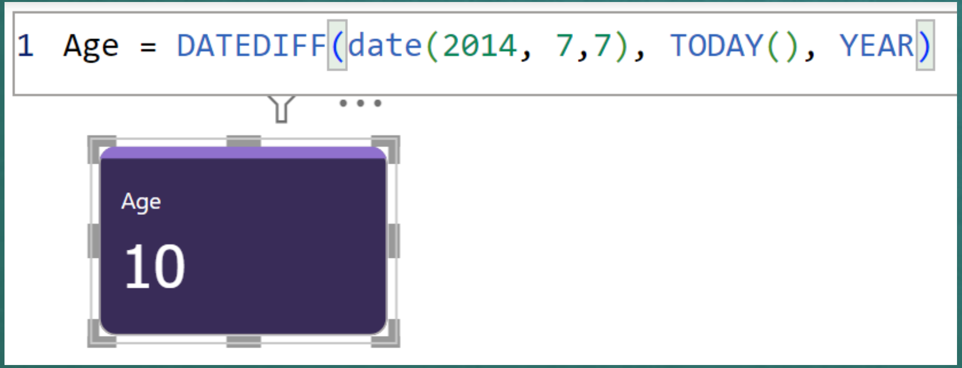
DATEDIFF

- Below example, interval as month and returns the number of days in positive.



```
date_diff_month = DATEDIFF(DATE(2024, 1, 11), DATE(2024, 3,10), MONTH)
```

- Calculating age with DATEDIFF()



```
Age = DATEDIFF(date(2014, 7,7), TODAY(), YEAR)
```

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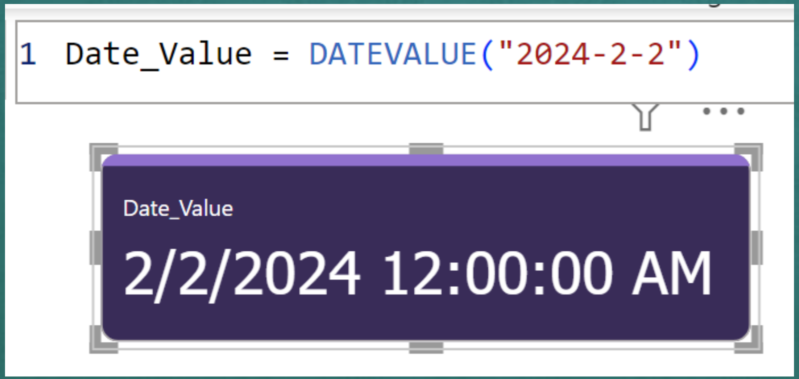
DATEVALUE

- DATEVALUE() function used to convert in the form of text into date value.
- It has a single parameter as input and returns a date in datetime type.
- It uses the local date/time settings of the model to determine the date.



```
Date_Value = DATEVALUE("2024-2-2")
```

Date_Value

2/2/2024 12:00:00 AM

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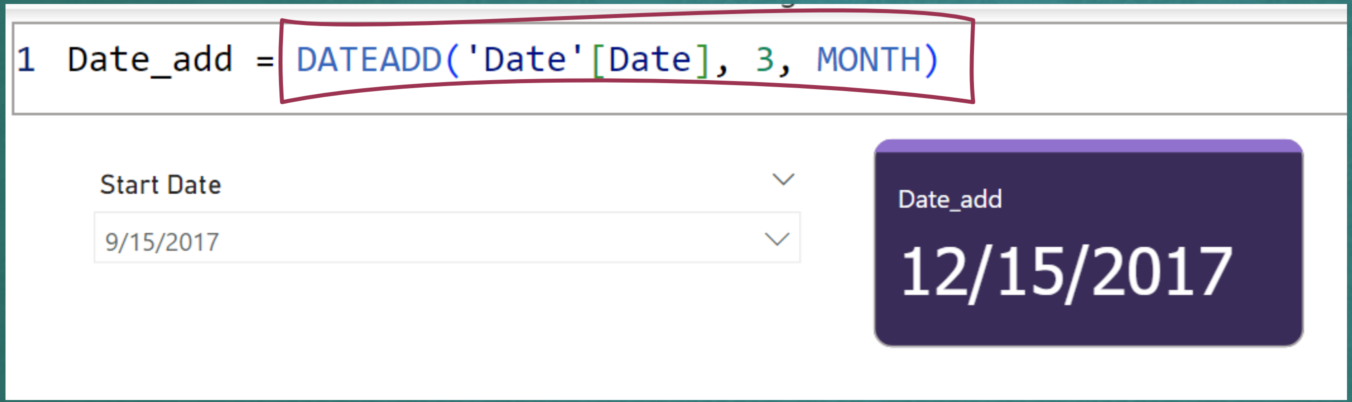
DATEADD

- DATEADD() function used to add specified number of units (day/month/year/hour/minute/second) to given date and return a new date value.
- It has a three different parameter as input.
- Start date as first parameter, it accepts date column as a parameter
- Number as second parameter – number of units add/remove from the starting date
- Interval as third parameter – type of interval to add (day/month/year/hour/minute/second) .

DATEADD



```
Date_add = DATEADD('Date'[Date], 3, MONTH)
```

- In the example, adding months as interval. Selecting start date as input to add 3 months.

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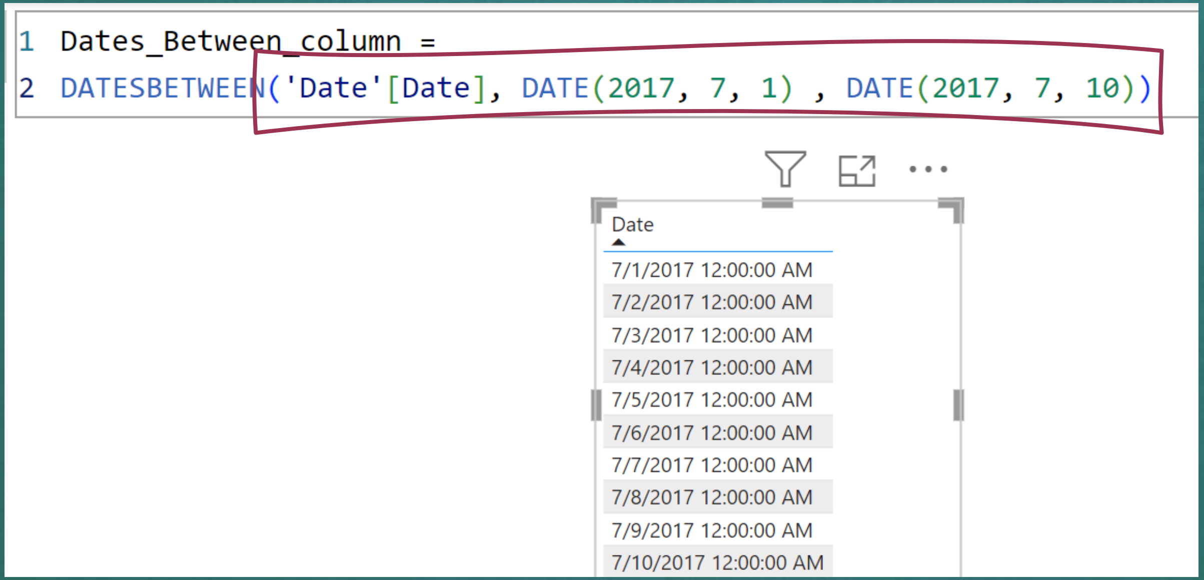
DATESBETWEEN

- DATESBETWEEN() function used to find the dates between the given start and end date.
- It returns a table of dates.
- It has a three different parameter as input.
- Date as first parameter, it accepts date column as a parameter
- Start and End date.
- When start and end dates are BLANK, the function takes earliest/ latest value in the date column as start/end date.

DATESBETWEEN

- DATESBETWEEN() function returning the dates between first of July to 10th of July as given in the code.



```
Dates_Between_column =
DATESBETWEEN('Date'[Date], DATE(2017, 7, 1) , DATE(2017, 7, 10))
```

Date
7/1/2017 12:00:00 AM
7/2/2017 12:00:00 AM
7/3/2017 12:00:00 AM
7/4/2017 12:00:00 AM
7/5/2017 12:00:00 AM
7/6/2017 12:00:00 AM
7/7/2017 12:00:00 AM
7/8/2017 12:00:00 AM
7/9/2017 12:00:00 AM
7/10/2017 12:00:00 AM

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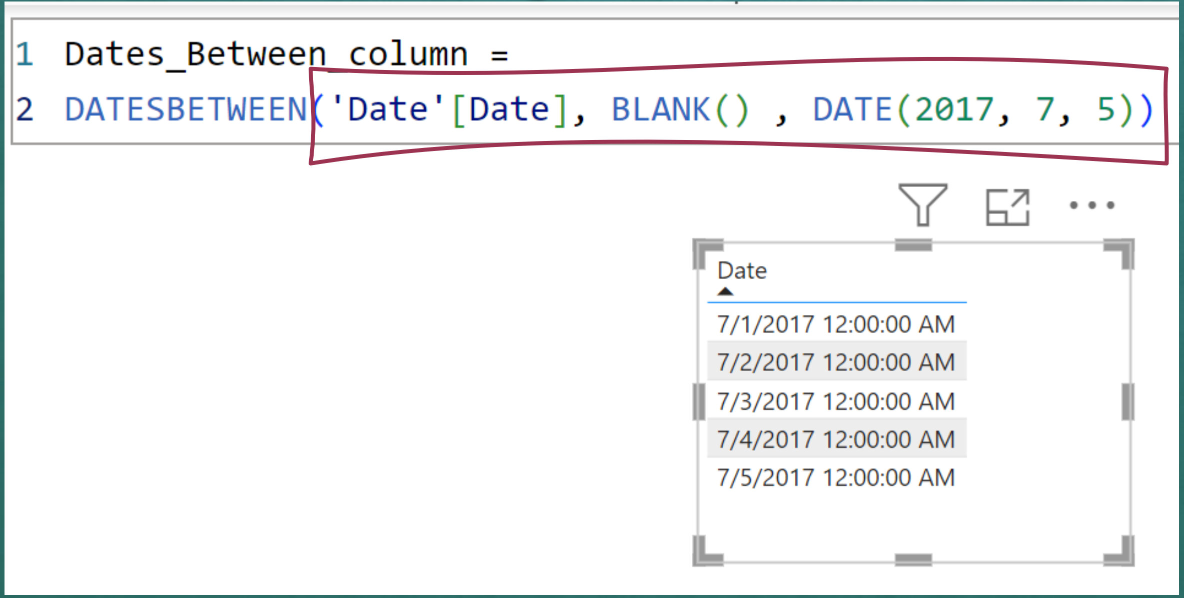
DATESBETWEEN

- DATESBETWEEN() function returning the dates between first of July to 5th of July as given in the code.
- Begin date given as BLANK(), so this function takes earliest date as start date from the given column.



```
Dates_Between_column =
DATESBETWEEN('Date'[Date], BLANK() , DATE(2017, 7, 5))
```

```
Date
7/1/2017 12:00:00 AM
7/2/2017 12:00:00 AM
7/3/2017 12:00:00 AM
7/4/2017 12:00:00 AM
7/5/2017 12:00:00 AM
```

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DATESINPERIOD

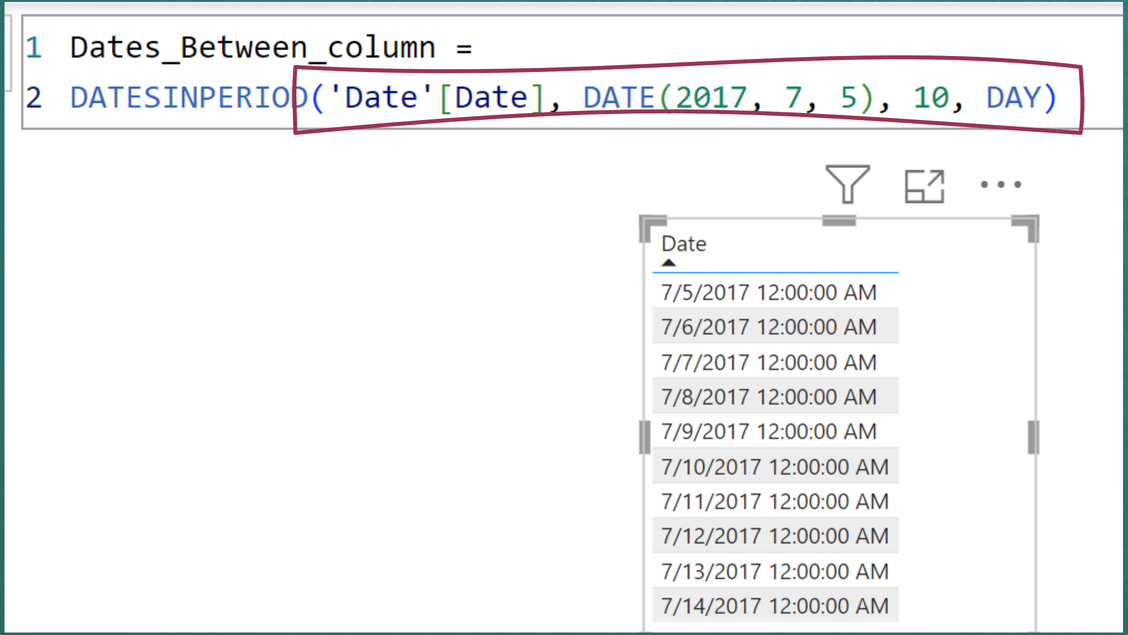
- DATESINPERIOD() function used to find the dates between the given start date and continuous for the specified number and interval.
- This is similar to the DATESBETWEEN(), but it calculates the range of dates differently. While DATESBETWEEN() requires specifying both start and end date directly, DATESINPERIOD() takes only start date and calculates range of dates based on specified interval and type.

DATESINPERIOD

- It has a 4 different parameter as input.
- Date as first parameter, it accepts date column as a parameter
- Start date as second parameter
- Number of intervals to add to/subtract from the start date.
- Interval as third parameter – type of interval to add (day/month/year/hour/minute/second) .

DATESINPERIOD

- In the code, Interval as DAY and number of interval set to 10, the function returns dates starting from July 5th and extending 10 days later.



```
Dates_Between_column =
DATESINPERIOD('Date'[Date], DATE(2017, 7, 5), 10, DAY)
```

Date
7/5/2017 12:00:00 AM
7/6/2017 12:00:00 AM
7/7/2017 12:00:00 AM
7/8/2017 12:00:00 AM
7/9/2017 12:00:00 AM
7/10/2017 12:00:00 AM
7/11/2017 12:00:00 AM
7/12/2017 12:00:00 AM
7/13/2017 12:00:00 AM
7/14/2017 12:00:00 AM

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