

Date & Time Tools <Doc 000034X-Day 00006Y BI>

Monday, July 31, 2023 4:17 PM

07.18.2023

In the Power Query Editor Box Inside the Add Column Option Inside the From Date & Time Section you will see the Date & Time Tools

The Age Option is the Difference between the Current Date and the Date in each Row

Date Only Option Removes the Time Component from a date/time field

Year/Month/Quarter/Week/Day Options Extracts individual components from a date field (time-specific options include Hour, Minute, Second, etc.)

Earliest/Latest Options Evaluates the earliest or latest date from a column as a single value (can only be accessed from the "Transform" menu)

★ **Most of the Time you'll want to use these Date options within the Add Column Option, not the Transform Option**

Build a Data Table Based off an Existing Date Column

In the Power Query Editor Box Inside the Home Option Click the New Source Option

Click the Text/CSV Option

Click the AdventureWorks Calendar Lookup Excel File

The AdventureWorks Calendar Lookup.csv Box Pops Up

Click the Green Rectangular Ok Button

In the Power Query Editor rename the Table Calendar Lookup

Check the Column Header's Data Type and make sure that it is the Date Data Type

In the Power Query Editor Box Inside the Transform Option Inside the Date & Time Column Section Click the Date Option

Click the Earliest Option

Inside Power Query's Applied Steps Section delete the Previous Date Change you made

In the Power Query Editor Box Inside the Transform Option Inside the Date & Time Column Section Click the Date Option

Click the Latest Option

Inside Power Query's Applied Steps Section delete the Previous Date Change you made

In the Power Query Editor Box Inside the Add Column Option Inside the Date & Time Column Section Click the Date Option

Hover over the Day Option

Click the Name of Day Option

A Column named Day Name is Added and the Days of the Weeks based off the Date Column are Added

In the Power Query Editor Box Inside the Add Column Option Inside the Date & Time Column Section Click the Date Option

Hover of the Week Column

Click the Start of Week Option

A Column named Start of Week is Added and the Date of the Start of the Weeks based off the Date Column are Added

If we wanted to Update the Start of the Week we could Edit the M Code in the Formula Bar

If we wanted to Update the Start of the Week we could Inside Power Query's Applied Steps Section Click the Gear Icon of the Step we want to edit

The Custom Column Box Pops Up

The = Date.StartOfWeek([Date]) Function (Inside the Custom Column Box) has an Optional second Parameter

The First Parameter of the Date.StartOfWeek([Date]) Function is the Data Column you want to use, the second is the first start of the first day of the week

Date.StartOfWeek([Date], 1) returns Monday

Click the Green Rectangular Ok Button

The Start of Week Column has shifted to reflect the first day of the week you entered

You can Edit the M Code in the Formula Bar so that `Date.StartOfWeek([Date], 2)` returns Tuesday

★ Inside the Custom Column Box you can edit the Custom column formula so that `Date.StartOfWeek([Date], Day.Monday)` returns Monday (instead of using the number 1)

Add the Start of Month to a Date Table

In the Power Query Editor Box Inside the Add Column Option Click the Date Option

Hover over the Month Option

Click Start of Month Option

→ If the Date and Start of Month Columns do not match then...

Select the Entire Date Column

In the Power Query Editor Box Inside the Add Column Option Click the Date Option

Hover over the Month Option

Click the Start of Month Option

A New Start of Month Column will generate based on the Date Column and not the Start of Week Column

Add the Start of Quarter Column to a Date Table

Highlight the Entire Date Column

In the Power Query Editor Box Inside the Add Column Option Click the Date Option

Hover over the Quarter Option

Click the Start of Quarter Option

In the Power Query Editor Box Inside the File Option Click Close & Apply Option

★ What Calendar Tables allow you to do is to filter and segment the values in a data set by any of these fields that we've created. This is going to be helpful when we use more analysis and visualization tools within Power BI