Power BI M Code Documentation

This query generates a Date Dimension table ranging from January 1, 2024, to May 1, 2025, with various date-related attributes used in time-based reporting in Power BI.

Step-by-Step Implementation in Power Query

1. Create Blank query and name it: Custom Date Table

2. Create Date List

- Go to Home tab → Click "Advanced Editor".
- Replace the default code with:

```
let
  StartDate = #date(2024, 1, 1),
  EndDate = #date(2025, 5, 1),
  NoOfDays = Duration.Days(EndDate - StartDate) + 1,
  DateList = List.Dates(StartDate, NoOfDays, #duration(1, 0, 0, 0))
in
  DateList
```

- Click **"Done"** → You'll see a **List**.

3. Convert List to Table

- Click "To Table" from the top ribbon (Transform tab).
- Use default options and click OK.

Now, add further columns:

```
let
    // Define the start and end dates for the calendar
    StartDate = #date(2024, 1, 1),
```

```
    EndDate = #date(2025, 5, 1),

    // Calculate number of days between StartDate and EndDate
    NoOfDays = Duration.Days(EndDate - StartDate) + 1,

    // Generate a list of dates from StartDate to EndDate
    DateList = List.Dates(StartDate, NoOfDays, #duration(1, 0, 0, 0)),

    // Convert list to table format
    #"Converted to Table" = Table.FromList(DateList, Splitter.SplitByNothing(), null, null, ExtraValues.Error),

    // Rename the single column to "Order Date"
    #"Add Rename Column" = Table.RenameColumns(#"Converted to Table", {{"Column1", "Order Date"}}),

    // Change type of Order Date to date
    #"change type" = Table.TransformColumnTypes(#"Add Rename Column", {{"Order Date", type date}}),

    // Add full weekday name (e.g., Monday)
    #"Insert Day Name" = Table.AddColumn(#"change type", "Weekday", each Date.DayOfWeekName([Order Date]), type text),

    // Add first character of the weekday
    #"Insert First Characters" = Table.AddColumn(#"Insert Day Name", "First Characters", each Text.Start([Weekday], 1), type text),

    // Add weekday number (custom logic): Mon=1, Tue=2, Wed=3, ..., Sun=7
```

```
    #"Add Conditional Column" = Table.AddColumn(#"Insert First Characters", "Weekday no",
        each if [Weekday] = "Monday" then 1
        else if [Weekday] = "Tuesday" then 2
        else if Text.StartsWith([Weekday], "W") then 3
        else if Text.StartsWith([Weekday], "Th") then 4
        else if Text.StartsWith([Weekday], "F") then 5
        else if Text.StartsWith([Weekday], "Sa") then 6
        else 7),

    // Extract Year
    #"Add Year" = Table.AddColumn(#"Add Conditional Column", "Year", each Date.Year([Order Date]), type number),

    // Extract Quarter number (1 to 4)
    #"Add quarter" = Table.AddColumn(#"Add Year", "Quarter", each Date.QuarterOfYear([Order Date]), type number),

    // Full month name (e.g., January)
    #"Add Month name" = Table.AddColumn(#"Add quarter", "Month name", each Date.MonthName([Order Date]), type text),

    // Short month name (e.g., Jan)
    #"Add short month name" = Table.AddColumn(#"Add Month name", "Short month name", each Date.ToText([Order Date], "MMM")),

    // Determine if the date is a weekend (Saturday or Sunday)
    #"Add Weekend" = Table.AddColumn(#"Add short month name", "Is Weekend",
```

```
        each if Date.DayOfWeek([Order Date]) >= 1 and Date.DayOfWeek([Order Date])
<= 5 then false else true,
        type logical),

    // Start date of the month for each date
    #"Add StartOfMonth" = Table.AddColumn(#"Add Weekend", "Start of month", each
Date.StartOfMonth([Order Date]), type date),

    // Day number of the year (1 to 365/366)
    #"Add day no of year" = Table.AddColumn(#"Add StartOfMonth", "Day no of year",
each Date.DayOfYear([Order Date]), type number),

    // Week number of the year using Monday as the first day of the week
    #"Add week no of year" = Table.AddColumn(#"Add day no of year", "Week no of
year", each Date.WeekOfYear([Order Date], Day.Monday), type number)

in

    // Final output table
    #"Add week no of year"
```