**DOCUMENTATION:**

**IRIS DASHBOARD:**

1. KPIs:

* Begin by creating key measures to showcase the maximum and minimum values of petal length, petal width, sepal length, and sepal width and the species corresponding to it.
* DAX CODE:

MaxPetalLength\_KPI =

VAR MaxPetalLength = MAX('iris-data'[petal-length])

VAR MaxSpecies = CALCULATE(MAX('iris-data'[Species]), 'iris-data'[petal-length] = MaxPetalLength)

RETURN

    MaxPetalLength & " (" & MaxSpecies & ")"

* Similarly, replace MAX with MIN to create a measure for minimum petal length. Repeat this process for other characteristics.

2. Organizing the display:

* Insert a textbox on the dashboard.
* Label it as "Petal Length".
* Add cards displaying maximum and minimum petal lengths.
* To group these elements, select the text box and the two cards, then navigate to the 'Format' option and choose 'Group'. This action consolidates these components, making them easier to manage and position.

3. Charts and Navigator:

* Generate bar and column charts to visualize data trends for both petal length and petal width. This provides a clearer understanding of the distribution and comparison of these characteristics.
* Integrate a page navigator to facilitate seamless navigation between different sections of the dashboard. This feature enhances user experience by allowing easy access to various insights and analyses.
* Duplicate the existing page to maintain consistency in design and layout.
* Repeat the steps, adjusting them as necessary, to showcase key measures and visualizations for sepal length and sepal width.

**WEATHER DASHBOARD:**

1. Data Manipulation and Transformation:

a. Changing Data Types: Adjusted all column data types for consistency.

b. Extracting Additional Information:

* Created new columns for:
* Month Name (as "month\_extracted").
* Month Number.
* Day of the Week Name (as "week\_day\_extracted").
* Day of the Week Number (as "week\_day\_number").
* This step ensures proper ordering even if month and day names are not consistently arranged.

2. Data Visualization:

a. Average Wind Speed Over Months:

* Utilized a line chart to visualize average wind speeds.
* Placed "month\_extracted" on the x-axis.
* Sorted months correctly by selecting "sort by column" and choosing the "month number".

b. Similar Visualization for Other Parameters: Employed line charts for other metrics following the same process.

c. Key Performance Indicators (KPIs):

* Configured KPIs by:
* Adding "cumulated hours" to values.
* Averaging the values.
* Setting "month\_extracted" as the trend axis.
* Utilizing the minimum of "cumulated hours" as the target for comparison.
* Repeated the process for average monthly air pressure.

d. Buttons for Navigation: Inserted page navigation buttons under the "insert" tab, then "navigator", and finally "page navigator".

e. Slicers for Filtering: Incorporated slicers for filtering data by month and week days.

f. Week Days Dashboard: Duplicated the current page and replaced "month\_extracted" with "week\_day\_extracted" to create a dashboard focused on weekdays.

g. Slicer Sync Across Dashboards: Ensured slicers are synchronized across both dashboards for seamless filtering by navigating to "view" and selecting "sync slicers". Then, selected all pages to apply the synchronization.