

Power BI Interview Prep

POWER QUERY:

1. What are the different types of modes in Power BI?

The different types of modes in Power BI are Import, Direct Query, and Live Connection.

2. What are the different types of Merges?

The different types of merges in Power Query are Inner Join, Left Outer Join, Right Outer Join, and Full Outer Join.

3. What is append and the criteria?

Append is used to combine tables vertically, and the criteria for appending is that the tables should have the same structure.

4. Parameters in Power Query.

Parameters in Power Query allow you to dynamically change values in your queries.

5. How to check column quality and profile for Every Record?

Check Column profiling based on entire record >> Go to View Tab >> Check Column Quality. Otherwise, it's by default to only 1000 records.

6. Fuzzy match.

Fuzzy match is a technique used to find approximate matches between two columns based on similarity.

7. What is the M query?

M query is the language used in Power Query to perform data transformations.

8. Efficient way to change the data source from CSV to SQL

You can use the "Edit Queries" option in Power Query to modify the source settings and point it to the SQL database.

POWER PIVOT:

1. Types of cardinalities.

The types of cardinalities in Power Pivot are One-to-One, One-to-Many, and Many-to-Many.

2. When you should use a Bi-directional filter flow? How to manage without opening the Bi-directional filter flow?

Bi-directional filter flow should be used when you need to filter data in both directions between two tables. To manage without opening the Bi-directional filter flow, you can use the "CROSSFILTER" DAX function.

3. Difference between Star, Snowflake, and Galaxy Schema.

Star, Snowflake, and Galaxy Schema are different data warehouse schema designs. Star schema has a central fact table surrounded by dimension tables, Snowflake schema has normalized dimension tables, and Galaxy schema combines elements of both.

4. Why do you need a disconnected table?

A disconnected table is used when you need to create a table that is not directly related to other tables in the data model.

5. Why do you need an inactive relationship?

An inactive relationship is used when you have multiple relationships between tables, but you want to temporarily disable one of them.

6. Could you explain a scenario in which you would need to use 1-to-1 cardinality?

A scenario where you would need to use 1-to-1 cardinality is when you have a single value associated with each unique value in a table, such as a customer's primary contact.

7. Types of dimension tables.

The types of dimension tables include Regular, Role-playing, Junk, Slow Changing, and Degenerate dimensions.

8. How do you manage SCD?

SCD stands for Slowly Changing Dimension and it refers to managing changes in dimension data over time. Techniques like Type 1, Type 2, and Type 3 SCD can be used to handle different scenarios.

POWER BI REPORTS:

1. Different types of filters?

Different types of filters in Power BI include visual-level filters, page-level filters, and report-level filters.

2. Bookmarks.

Bookmarks in Power BI allow you to capture the current state of a report, including filters, slicers, and visuals, and then revisit that state later.

3. Field parameters.

Field parameters in Power BI allow you to create dynamic measures or calculations based on user-selected fields.

4. Custom tooltips.

Custom tooltips in Power BI allow you to customize the information displayed when hovering over a visual.

5. Drill Down.

Drill Down is a feature in Power BI that allows you to navigate from a higher-level summary to a more detailed view by expanding hierarchies or categories.

6. Drill Through.

Drill Through is a feature in Power BI that allows you to navigate from one report page to another, passing context or filters along the way.

7. Questions related to charts and graphs and when to use what.

Charts and graphs in Power BI can be used for various purposes, such as;

- Comparing values (bar chart)
- Showing trends over time (line chart)
- Displaying proportions (pie chart)

The choice of chart depends on the type of data and the insights you want to convey.

8. Difference between Report and Dashboard.

A report in Power BI is a collection of visuals, pages, and filters that provide a detailed view of data. A dashboard, on the other hand, is a single page that provides a high-level overview of key metrics and visuals from multiple reports.

9. Edit Interaction.

Edit Interaction in Power BI allows you to control how visuals interact with each other, specifying whether one visual should filter or highlight another visual.

DAX:

Basic DAX Functions					
Filter Functions	Aggregation Functions	Time Intelligence Functions	Text Functions	Logical Functions	Window Functions
Tiller Fulletions		T directoris			Turiculoris
CALCULATE	SUM / SUMX	DATEDIFF	CONCATENATE	IF	WINDOW
ALL / ALLEXCEPT / ALLSELECTED	AVERAGE / AVERAGEX	DATEADD	SEARCH / FIND	IFERROR	INDEX
REMOVEFILTER	MAX / MAXX	PARALLELPERIOD	FORMAT	ISBLANK	OFFSET
RELATED / RELATEDTABLE / LOOKUPVALUE	MIN / MINX	TODAY / NOW	UNICHAR	COALESCE	
DISTINCT / VALUES	DIVIDE	TOTALYTD / TOTALQTD / TOTALMTD	LEFT / MID / RIGHT	AND	
EARLIER / EARLIEST	COUNT / COUNTA	DATESYTD / DATESQTD / DATESMTD	REPLACE / SUBSTITUTE	OR	
HASONEVALUE / HASONEFILTER / ISFILTERED	COUNTROWS / DISTINCTCOUNT	DATESINPERIOD	UPPER / LOWER / PROPER	NOT	
	COUNTX	DATESBETWEEN	LEN	SWITCH	
INTERSECT	RANKX	YEAR / MONTH / DAY	TRIM	TRUE	
UNION			REPT	FALSE	
IN VALUES					
IN					
Advanced DAX Functions					
For Bi-directional Cardinality	CROSSFILTER				
For In-active Cardinality	USERELATIONSHIP				
For RLS	USERPRINCIPALNAME				
For Filtering through Disconnected Tables	TREAT AS				

1. Difference between Filter Context and Row Context.

Filter Context refers to the set of filters applied to a calculation, while Row Context refers to the context of a single row during calculation.

Filter Context determines which rows are included in the calculation, while Row Context determines the values used in the calculation for each individual row.

2. Calculated column vs. measures.

Calculated columns are columns that are created in a table and their values are calculated for each row. Measures, on the other hand, are calculations that are performed on the fly and can aggregate data across multiple rows or tables.

3. Iterator functions.

Iterator functions in DAX allow you to perform calculations over a set of values or iterate through rows in a table. Examples of iterator functions include SUMX, AVERAGEX, and COUNTX.

4. Focus on Time Intelligence functions because big MNCs often ask questions related to the syntax of TOTALYTD/TOTALMTD/TOTALQTD.

Time Intelligence functions in DAX, such as TOTALYTD, TOTALMTD, and TOTALQTD, are used to perform calculations based on time periods, such as year-to-date, month-to-date, and quarter-to-date.

5. What is a Variable in DAX?

In DAX, a variable is a named placeholder that can hold a value or an expression. It allows you to simplify complex calculations by assigning intermediate results to variables.

6. Different types of Filter functions.

Filter functions in DAX, like CALCULATE, ALL, and ALLEXCEPT, are used to modify or override the filter context and control which rows or columns are included in a calculation.

POWER BI SERVICE:

1. How do schedule a refresh?

To schedule a refresh in Power BI Service, you need to go to the dataset settings and configure a refresh schedule. You can choose from options like daily, weekly, or custom schedules.

2. RLS and Dynamic RLS.

RLS (Row-Level Security) in Power BI allows you to restrict data access based on user roles or permissions. Dynamic RLS allows you to dynamically apply filters based on the logged-in user's credentials or attributes.

3. Difference between My Workspace vs. App Workspace.

My Workspace is a personal workspace in Power BI Service where you can create and manage your own reports, dashboards, and datasets.

App Workspace is a shared workspace where you can collaborate with others on reports and dashboards.

4. Pin to the dashboard.

Pinning to the dashboard in Power BI Service allows you to add visuals or entire reports to a dashboard for quick access and monitoring. You can pin visuals from different reports or datasets to a single dashboard.