Power BI Interview Questions & Answers - 2025 Edition

Q: What is Power BI and why use it?

A: Power BI is a business intelligence tool that helps users visualize, analyze, and share data insights across different data sources.

Q: What are the main components of Power BI?

A: Power BI Desktop, Power BI Service, Power BI Mobile, and On-Premises Data Gateway.

Q: What is Import mode vs DirectQuery?

A: Import mode loads data into Power BI's model for faster queries. DirectQuery connects to the data source directly for real-time results but may be slower.

Q: What is Query Folding?

A: Query Folding allows Power Query to push transformations back to the data source, improving performance by using the database engine's power.

Q: What is a calculated column vs a measure in DAX?

A: Calculated columns are stored in the model and computed row-by-row. Measures are calculated dynamically at query time and improve performance.

Q: What is Row-Level Security (RLS)?

A: RLS filters data based on user roles using DAX filters, ensuring users see only data they're authorized to view.

Q: What is a star schema and why use it?

A: A star schema uses a central fact table connected to multiple dimension tables. It improves query speed and simplifies relationships.

Q: What is a snowflake schema?

A: A snowflake schema normalizes dimension tables into sub-tables, reducing redundancy but increasing complexity.

Q: How do you optimize performance in Power BI?

A: Reduce model size, minimize columns, use Import mode, enable query folding, use aggregations, and simplify DAX expressions.

Q: What is incremental refresh?

A: It refreshes only new or modified data, reducing load times for large datasets.

Q: What is a Power BI Gateway and when is it needed?

A: A gateway connects on-premises data to Power BI Service for scheduled refreshes.

Q: What are filters in Power BI (report, page, visual)?

A: Report filters affect all pages, page filters affect one page, and visual filters affect specific visuals.

Q: What are slicers and bookmarks?

A: Slicers are visual filters; bookmarks save report states for navigation or storytelling.

Q: How to design a time dimension / date table?

A: Create a dedicated date table with year, month, quarter, and day columns, and mark it as the official date table.

Q: How do you handle many-to-many relationships in Power BI?

A: Use bridge tables or composite models, and manage bidirectional filters carefully.

Q: What is a disconnected table used for?

A: Used for parameterization or dynamic calculations, typically unrelated but referenced via DAX logic.

Q: How is a dashboard different from a report in Power BI?

A: A dashboard is a single-page summary view; reports are multi-page with deeper interactions.

Q: How do you share reports and collaborate in Power BI Service?

A: Publish to workspaces, share with users, manage roles, or distribute through Power BI Apps.

Q: What is role-level data security vs dynamic security?

A: Role-level security is static filtering; dynamic uses USERPRINCIPALNAME() for user-specific data access.

Q: Describe a complex DAX measure you've built.

A: Example: YTD Sales \rightarrow CALCULATE(SUM(Sales[Amount]), FILTER(ALL('Date'), 'Date'[Date] <= MAX('Date'[Date]))). It calculates cumulative sales up to the current date.