

Top 50 Power-BI interview questions and answers

Q 1. What is Power BI?

ANS :- Power BI is a business analytics tool by Microsoft that provides interactive visualizations and business intelligence capabilities with an interface simple enough for end users to create their own reports and dashboards.

Q 2. What are the key components of Power BI?

ANS :- The key components are Power BI Desktop, Power BI Service, and Power BI Mobile.

Q 3. What is Power BI Desktop?

ANS :- Power BI Desktop is a desktop application used for creating and publishing reports.

Q 4. What is the Power BI Service?

ANS :- Power BI Service is an online service for sharing and collaborating on Power BI reports.

Q 5. What are Power BI dashboards?

ANS :- Dashboards are single-page, often called canvases, that use visualizations to tell a story.

Q 6. What is a Power BI report?

ANS :- A report is a multi-perspective view into a dataset, with visualizations representing different insights from the dataset.

Q 7. What is DAX?

ANS :- DAX (Data Analysis Expressions) is a formula language used in Power BI, Power Pivot, and SSAS for creating custom calculations.

Q 8. What are some common data sources for Power BI?

ANS :- Common data sources include Excel, SQL Server, Azure, SharePoint, and web data.

Q 9. How do you refresh data in Power BI?

ANS :- Data can be refreshed manually in Power BI Desktop or automatically scheduled in the Power BI Service.

Q 10. What are Power BI visualizations?

ANS :- Visualizations are graphical representations of data, such as charts, graphs, maps, etc.

Q 11. What is Power Query?

ANS :- Power Query is a data connection technology that enables you to discover, connect, combine, and refine data across a wide variety of sources.

Q 12. What is the use of the Power BI gateway?

ANS :- The gateway is used to securely connect on-premises data sources to Power BI.

Q 13. What are calculated columns in Power BI?

ANS :- Calculated columns are new data columns created using DAX formulas based on other columns in the dataset.

Q 14. What are measures in Power BI?

ANS :- Measures are calculations used in data analysis, such as sums, averages, or more complex aggregations, created using DAX.

Q 15. What is a data model in Power BI?

ANS :- A data model is a collection of tables, relationships, and calculations that underpin a Power BI report.

Q 16. How do you create a relationship between tables in Power BI?

ANS :- Relationships can be created by dragging and dropping fields between tables in the relationship view.

Q 17. What is a slicer in Power BI?

ANS :- A slicer is a visual filter that allows users to segment data in a report.

Q 18. What is a Power BI template?

ANS :- A template is a file that includes a Power BI report definition and layout but not the data itself, allowing users to create new reports based on a pre-defined structure.

Q 19. What is the use of the 'Get Data' feature in Power BI?

ANS :- The 'Get Data' feature is used to connect to and import data from various sources into Power BI.

Q 20. What is drill through in Power BI?

ANS :- Drill through allows users to navigate to a different report page that is filtered to display specific details.

Q 21. How can you share Power BI reports?

ANS :- Reports can be shared via the Power BI Service by publishing them and sharing links or workspaces with others.

Q 22. What is a custom visual in Power BI?

ANS :- Custom visuals are additional visual types that can be imported into Power BI to extend its visualization capabilities.

Q 23. What are Power BI apps?

ANS :- Power BI apps are collections of dashboards and reports that are bundled together and can be shared with other users.

Q 24. What is a KPI in Power BI?

ANS :- A KPI (Key Performance Indicator) is a visual cue that communicates the amount of progress made toward a measurable goal.

Q 25. How do you handle large datasets in Power BI?

ANS :- Large datasets can be managed using data reduction techniques, such as aggregations, filters, or incremental data refresh.

Advanced Questions

Q 26. What is row-level security (RLS) in Power BI?

ANS :- RLS allows you to restrict data access for certain users based on roles defined within Power BI

Q 27. What is a calculated table in Power BI?

ANS :- A calculated table is a new table created in Power BI using DAX expressions.

Q 28. How do you optimize Power BI reports for performance?

ANS :- Optimize reports by reducing the data model size, using efficient DAX calculations, minimizing visuals, and optimizing queries.

Q 29. What are Power BI workspaces?

ANS :- Workspaces are collaborative environments where users can create, share, and manage reports and dashboards.

Q 30. What is Power BI Embedded?

ANS :- Power BI Embedded is a service that allows you to embed Power BI reports and dashboards into your custom applications.

Q 31. What is the purpose of the Power BI REST API?

ANS :- The REST API allows developers to programmatically interact with Power BI service, automating tasks like embedding reports, creating datasets, and refreshing data.

Q 32. How do you create a custom date table in Power BI?

ANS :- A custom date table can be created using DAX or imported from a source, providing a dedicated table for date-related calculations.

Q 33. Explain the use of the CALCULATE function in DAX.

ANS :- CALCULATE changes the context in which data is evaluated, allowing for advanced filtering and manipulation of measures and calculated columns.

Q 34. What are hierarchies in Power BI?

ANS :- Hierarchies allow you to organize data into levels, such as year, quarter, month, enabling drill-down capabilities in visualizations.

Q 35. What is a dataflow in Power BI?

ANS :- A dataflow is a collection of tables created and managed in the Power BI Service, used to streamline data preparation and ETL processes.

Q 36. Explain the use of the FILTER function in DAX?

ANS :- FILTER returns a table that includes only rows that meet the specified criteria, often used in combination with CALCULATE.

Q 37. What are the benefits of using Power BI Premium?

ANS :- Power BI Premium offers dedicated capacity, larger dataset sizes, more frequent data refreshes, and advanced AI capabilities.

Q 38. Explain the use of the CALCULATE function in DAX ?

ANS :- CALCULATE changes the context in which data is evaluated, allowing for advanced filtering and manipulation of measures and calculated columns.

Q 39. What is incremental refresh in Power BI?

ANS :- Incremental refresh allows you to update only the data that has changed, rather than refreshing the entire dataset, improving performance and efficiency.

Q 40. How do you create a measure to calculate year-over-year growth in Power BI?

ANS :- Use DAX functions like CALCULATE, SAMEPERIODLASTYEAR, and DIVIDE to create measures that compare current and previous year values and calculate growth.

Q 41. What is Power BI Report Server?

ANS :- Power BI Report Server is an on-premises report server that allows you to create, publish, and manage Power BI reports and paginated reports.

Q 42. Explain the use of the RELATED function in DAX.

ANS :- RELATED returns a value from a related table, allowing you to use columns from related tables in your calculations.

Q 43. How do you implement dynamic titles in Power BI visuals?

ANS :- Use measures and conditional formatting to create titles that change based on slicer selections or other user inputs.

Q 44. What is the purpose of the VALUES function in DAX?

ANS :- VALUES returns a one-column table of unique values from a specified column, often used to create dynamic calculations.

Q 45. What are parameters in Power BI?

ANS :- Parameters are used to create dynamic reports by allowing users to input values that filter or change data in the report.

Q 46. How do you use the SWITCH function in DAX?

ANS :- SWITCH evaluates an expression against a list of values and returns the corresponding result, similar to a case statement in programming.

Q 47. Explain the concept of context transition in DAX.

ANS :- Context transition occurs when row context is converted to filter context, typically when using CALCULATE or certain iterators in DAX.

Q 48. What is the purpose of the ALLEXCEPT function in DAX?

ANS :- ALLEXCEPT removes all filters from a table except for the specified columns, useful for calculating values in a specific context.

Q 49. How do you handle circular dependencies in DAX?

ANS :- Avoid circular dependencies by restructuring calculations, ensuring no measure or calculated column depends on itself directly or indirectly.

Q 50. Explain the difference between DirectQuery and Import mode in Power BI.

ANS :- Import mode imports data into Power BI, providing fast performance and full functionality. DirectQuery queries data directly from the source, allowing for real-time data access but with some limitations on features and performance.

*Thank
you!*

