

# COMPREHENSIVE GUIDE TO MICROSOFT PL-300 EXAM



# Introduction

We've curated this series of interview guides to accelerate your learning and your mastery of data science skills and tools.

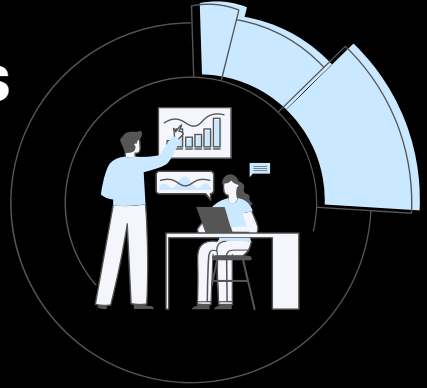
From job-specific technical questions to tricky behavioral inquiries and unexpected brainteasers and guesstimates, we will prepare you for any job candidacy in the fields of data science, data analytics, or BI analytics.

These guides are the result of our data analytics expertise, direct experience interviewing at companies, and countless conversations with job candidates. Its goal is to teach by example - not only by giving you a list of interview questions and their answers, but also by sharing the techniques and thought processes behind each question and the expected answer.

Become a global tech talent and unleash your next, best self with all the knowledge and tools to succeed in a data analytics interview with this series of guides.



# COMPREHENSIVE GUIDE TO INTERVIEWS FOR DATA SCIENCE



Data Science interview questions cover a wide scope of multidisciplinary topics. That means you can never be quite sure what challenges the interviewer(s) might send your way.

That being said, being familiar with the type of questions you can encounter is an important aspect of your preparation process.

Below you'll find examples of real-life questions and answers. Reviewing those should help you assess the areas you're confident in and where you should invest additional efforts to improve.

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1) Which is a difference between a shared and local dataset?

- a) A local dataset only works for local data sources (I.e. Excel files).
- b) A local dataset creates a live connection to the Power BI Service.
- c) A shared dataset can be reused by multiple members of a workspace

2) True or False: A Power BI Data model can contain only import tables or Direct Query tables; it is not possible to have both in the same data model.

- a) True
- b) False

3) A client requires near-Real time data displayed in their report. Choose the appropriate database connection type.

- a) DirectQuery
- b) Import
- c) Storage Mode
- d) None of the above

4) What are the two options available in Power Query to combine multiple tables together?

- a) Merge and Sort
- b) Merge and Append
- c) Append and Combine
- d) Append and Sort

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5) True or False: if you want to model your data (e.g. define your own relationships and create DAX measures) you need to use Power BI Desktop rather than just connecting to data in the Power BI Service.

- a) True
- b) False

6) What is meant by a Live connection in Power BI?

- a) Database connection that utilizes Single Sign on to authenticate against the underlying Source (e.g. SQL)
- b) Connecting to a pre-built data model e.g. an Analysis Services Database or data model in the Power BI Service.
- c) The data shows in real-time from the data source
- d) A way to run queries directly on the source system

7) You want to connect to an on-premise database in your company (which has been set up on a Gateway) but are unable to obtain credentials to connect directly to it yourself. What would be the best way to gain access to this data?

- a) Ask the data source owner/IT to create a Dataflow which connects to the database (via Gateway) and request access to the workspace in which the dataflow is hosted
- b) Use the 'Get Data' Option in Power BI Service and connect via the Gateway
- c) Connect using Power BI Desktop and connect via the Gateway

8) Why is the column profiling feature in the Query Editor potentially useful?

- a) It indicates which columns take the longest time to load so you can look to optimize the queries applied against these columns
- b) It provides an indication of which columns are not used in the data model and therefore can be removed to minimize data size
- c) It provides a view of data quality (e.g. where there are blank or error rows) and allows you to understand which columns require cleaning before being loaded into the data model

9) If you want to combine two or more existing queries in the query editor together (with the same columns) as a one-off exercise, which of the following features would you use?

- a) Join Queries
- b) Append Queries
- c) Merge Queries
- d) Get Data From Folder

10) Calculate tables are created in DAX and can be viewed in the Power Query editor.

- a) True
- b) False

11) Which of the following is not a necessary step in order to configure row-level security on the Power BI Service?

- a) Define roles within Power BI Desktop
- b) Apply filtering to specific tables based on logic for roles
- c) Add users or groups to roles within the Power BI Service
- d) Publish app to entire organization

12) Imagine that a user creates an implicit measure in a Power BI report by averaging the Unit Price column. They then filter down the data to only show the Novelty Shop customer category. If you wanted to code this into a DAX measure, which of the following will produce the correct results?

- a) `AVERAGE('Sales Orderlines'[Unit Price])`
- b) `AVERAGE('Sales Orderlines'[Unit Price]) && 'Customer Category'[CustomerCategoryName] = 'Novelty Shop'`
- c) `CALCULATE(AVERAGE('Sales Orderlines'[Unit Price]), 'Customer Category'[CustomerCategoryName] = 'Novelty Shop')`
- d) `CALCULATE(AVERAGE('Sales Orderlines'[Unit Price]))`

13) Semi-additive calculations (i.e. balance at end of month) often use which of the following functions?

- a) `LASTDATE`
- b) `SUM`
- c) `AVERAGE`
- d) `SEARCH`



14) Power BI's Vertipaq Engine compresses the data loaded into Power BI to reduce model size and speed up report performance. Which of the following actions will have the largest positive impact on compression?

- a) Renaming all columns to lowercase
- b) Removing unnecessary columns from the data model
- c) Optimizing Power Query joins
- d) Removing unnecessary measures

15) Imagine you have a datetime data column with various datetime values. Converting the column to a date datatype will have which effect on cardinality?

- a) Increase
- b) Decrease
- c) The cardinality will stay the same.

16) Aggregations are a useful feature to speed up model performance. Which of the following statements is true?

- a) All data sources must be set to DirectQuery mode.
- b) All data sources must be set to Import mode.
- c) At least one data source must be set to DirectQuery and one data source must be set to Import mode.
- d) Aggregations can work regardless of the data connection modes.

17) You receive the following requirements: "I want to show the correlation between Quantity and Unit Price. I would like each individual transaction to show on the chart." Which visualization type would best display the required data?

- a) Bar Chart
- b) Line Chart
- c) Matrix
- d) Scatter Chart

18) You can interact with T and Python visuals by hovering over them and clicking on them to cross-filter other visualizations on the page.

- a) True
- b) False

19) A report or dashboard will not render on the Power BI mobile app without firstly creating a custom mobile view.

- a) True
- b) False

20) Data alerts can be set up on which of the following groups of visuals?

- a) Cards, line, charts, tables.
- b) Cards, gauges, KPIs.
- c) Matrices, line charts, column charts.
- d) All of the above.

21) When you pin a live report page from a report to a dashboard, the data will update automatically when the report data is refreshed?

- a) True
- b) False

22) When creating a “Clear All Filters” bookmark, it is important to ensure that which of the following bookmark options is checked in order to save the state of the cleared page?

- a) Data
- b) Display
- c) Current Page
- d) All Visuals

23) Which is not a valid option for editing interaction between visuals?

- a) Filter
- b) Cross-Highlight
- c) Multi-select
- d) No Interaction

24) Sync Slicers allow slicer selections to carry over between pages. This functionality requires that all slicers be visible on each page.

- a) True
- b) False

25) Which of the following is NOT a function available in the Selection Pane?

- a) Setting the tab order.
- b) Hiding visuals on the report page.
- c) Setting the layer order of visuals.
- d) Syncing visuals across multiple pages.

26) Your client wants to only show the five US states with the most orders in the past year. Which of the following methods will best visualize the necessary data?

- a) Conditional formatting
- b) Top-N analysis
- c) Slicing and Filtering
- d) Python and R visuals

27) Which of the following options does NOT use Power BI's baked-in artificial intelligence?

- a) Quick Insights
- b) Q&A Visual
- c) Key Influencers visual
- d) Python or R visuals

28) Reference lines and forecasting can be applied in the which pane?

- a) Formatting Pane
- b) Visualization Pane
- c) Analytics Pane
- d) Selection Pane

29) A client would like a clear view of the sales performance on weekdays and weekends. Which of the following functionality will help you easily provide the answer?

- a) Binning
- b) Decomposition Tree Visual
- c) Grouping
- d) Reference lines

30) When interacting with the Decomposition Tree visual, the breakdown order is set by the order of fields added to the visual during authoring step. The user cannot drill down in a different order.

- a) True
- b) False

31) Fill in the blanks. A Power BI Pro subscription allows you to set up \_ scheduled refreshes per day while Power BI Premium allows \_ scheduled refreshes per day.

a) 24, 48

b) 8, 48

c) 3, 24

d) 3, 48

32) The RangeStart and RangeEnd parameters must be created in a Power BI Desktop file as the first step to set up incremental refresh.

a) True

b) False

33) Incremental refresh can be set up for which of the following data sources out of the box?

a) Web based (i.e. web page)

b) Database (i.e. Azure SQL)

c) Local files (i.e. Excel)

d) All of the above.

34) Workspace apps cannot be shared with which of the following options?

a) Specified users via email addresses.

b) External users in a different organization.

c) The entire organization.

d) The entire internet (i.e. publish to the web).

35) Endorsing a dataset is a good way to let users know that the data model can be trusted for further development purposes. Which of the following are valid types of endorsements? Select all that apply.

- a) Promoted and Certified
- b) Advocated and Promoted
- c) Distinguished and Advocated
- d) Advocated and Certified

36) If you want to provide workspace access to a co-worked to allow them to create and edit Power BI reports but don't want them to be able to update apps, which workspace role should be assigned?

- a) Viewer
- b) Contributor
- c) Admin
- d) Member

37) What do you need to append to the URL of a Power BI dashboard in order to open it with the navigation pane collapsed by default?

- a) ?navigationPane=collapsed
- b) ?collapseNavigation=true
- c) ?navigationPane=false
- d) ?collapseNavigation=collapsed

38) Which of the following are not advantages that Power BI reports have over Power BI dashboards?

- a) Reports provide a better real-time experience when displaying data from a streaming dataset.
- b) Reports provide story telling capabilities using bookmarks.
- c) Report definitions can be saved using an external file format (PBIX) and checked into source control.
- d) Reports provide a better interactive filtering and drilldown experience

39) Which of the following visuals is not included as part of Power BI and must be added as a custom visual?

- a) Histogram
- b) Waterfall
- c) Donut
- d) Stacked Area

40) Which page view types are not available in Power BI Report View?

- a) Fit to Width
- b) Actual Size
- c) Full Screen
- d) Fit to page



41) Which of the following statements are true with respect to designing a Power BI Desktop project in DirectQuery mode?

- a) You cannot convert column data types when editing a query.
- b) All queries within the project must be from a single source database.
- c) You cannot add calculated columns to the data model.
- d) You cannot add measures to the data model.

42) In order to use the Power BI web part in SharePoint Online, the report author as well as all the report consumers require a Power BI Pro license. Is this statement true?

- a) True
- b) False

43) By default, which filter level behaves the same as a slicer in a report in Power BI Desktop?

- a) Report level filter
- b) Query level filter
- c) Page level filter
- d) Visual level filter

44) Months are sorted alphabetically in Stacked bar chart. What can you do to sort it by month number?

- a) Modeling -> Select Month Column -> Sort By - MonthNumber
- b) Click on ellipses on Right Top Corner of visual -> Sort by - MonthNumber
- c) Right Click on field in report view and select sort by, then select MonthNumber

45) How can you make sure that each category manager can see sales of their category only and CEO to see all sales in the same report? Your solution must involve minimal effort.

- a) Implement Dynamic row-level security
- b) Create one report for each category manager, with a different category filter in each report, and a separate report for the CEO.
- c) Create a category slicer in the report.

46) Which two field options are available when creating a waterfall chart?

- a) Category and Y Axis
- b) Size and Y Axis
- c) X Axis and Y Axis
- d) X Axis and Category

47) Using the bookmarking features in the report designer in Power BI Desktop, there is a limitation of creating only one bookmark per page in a report. Is this statement correct?

a) False

b) True

48) What is the purpose of TRIM function?

a) It will remove white space from start and end of a string.

b) It trims a specific character from string.

c) It will remove white space from a string.

49) Which feature is used to create alternative name for fields in tables? It will make it much easier for users to ask questions on dashboards?

a) Duplicate Name

b) Synonyms

c) Alternative

50) Which of the following types of real-time data set in Power BI do not store their data in Azure SQL Database?

a) Push Datasets

b) Streaming Datasets

c) Hybrid Datasets

51) You want to create a line chart showing Quantity by the invoice date. You notice that there is a relationship between the Date from the Date table and the Invoice Date Key from the Sale table, but the relationship is inactive. All other visuals in your report will be analyzing values by delivery date. How should you approach this problem?

a) Use the TREATAS function.

b) Create the following measure: Quantity by Invoice Date  
=CALCULATE ( SUM ( Sale[Quantity] ), USERELATIONSHIP ( 'Date'[Date], Sale[Invoice Date Key] ) )

c) Activate the relationship based on invoice date, keeping the other relationship as is.

d) Delete the relationship based on the delivery date and activate the relationship based on the invoice date.

52) What happens to the data types of Query Editor that are not available in data model while loading data?

a) These types will be converted to related data types.

b) Tables with not supported types will throw an error.

c) Data with these types will not load into data model.

53) Which property of a tile cannot be edited in the Power BI dashboard from the Tile details window?

a) Destination link

b) Title

c) Color scheme

d) Subtitle

54) Which view shows the graphical representation of data tables structure in query editor?

- a) Advance Editor
- b) Manage Data-source
- c) Query Dependency

55) In Power BI Desktop Report view, which option will not create a measure in the Sales table?

- a) Select the Sales table in the Fields list, and then click New Measure in the Modeling ribbon.
- b) Click New Measure, and then type in the formula `Home Table = Sales`
- c) Create the measure from any table, and then set the Home Table properties to Sales.
- d) On the Fields list, click the ellipsis next to the Sales table or right-click any field in the Sales table, and then click New Measure.

56) To create a column chart that displays Quantity by Color and can be drilled down to show Quantity by Stock Item. Which of the following solves the problem?

- a) Put Color on Axis and Stock Item on Tooltips.
- b) Put Color and Stock Item on axis.
- c) Put Color on axis and Stock Item on legend.

57) What is the file format used to define a theme for a Power BI report?

- a) JavaScript Object Notation (JSON)
- b) Power BI Markup Language (PBIML)
- c) Cascading Style Sheets (CCS)
- d) Extensible Markup Language (XML)

58) What is true about using variables in DAX?

- a) Maximum of 5 variables can be created per formula.
- b) Variables must be defined inside return
- c) Variables are created only one time in the current context

59) Power BI comes with a range of visualizations to portray any data story you wish. There is one particular visual that is perfect to help users understand and analyze cash-flow during the ups and downs of all months in a financial year.

Which visualization is this?

- a) Stacked column chart
- b) Treemap
- c) Waterfall chart
- d) Scatter chart

60) Which transformations is not available when you right-click a column header in the Query Editor window?

- a) Remove
- b) Change Type
- c) Duplicate Column
- d) Count Rows

61) A dataset is available in Power BI service online. Would you be able to import data from Power BI Service online using Get Data --> Power BI dataset?

- a) Yes
- b) No

62) Select the feature that allows you to navigate through HTML tags to get the data from website?

- a) Get JSON Data
- b) Scaffolding
- c) Web Scraping

63) As part of a large BI project you have created a new dashboard for consumption by the HR team. After opening the Get Data menu option and selecting SQL Server, you are not sure which Data Connectivity mode to select. If you want the data to automatically refresh as you interact with visualizations which option should you choose?

- a) Import
- b) DirectQuery

64) You are creating a fancy little dashboard using Power BI Service. The dashboard shows the accumulative increase in the global population over the last several decades. The dashboard will contain an introductory YouTube video that you have uploaded to the YouTube website. After uploading the video, you copy the embedded HTML code and paste it into your dashboard. Unfortunately, the video is fixed to 560 pixels wide and you would like it to expand to fit the tile size. What should you do?

- a) Change the iFrame width and height attribute values to 100%
- b) Add an extra outer DIV with a style width:auto and height:auto value
- c) Videos are fixed size and can't expand to fit tiles
- d) Remove the allowfullscreen parameter from the code

65) A large corporate project requires the data team to create a number of different Power BI reports for the company's internet sales data. You need to create a measure that estimates the variance of the SalesAmount\_USD column from your InternetSales\_USD table, for the entire population. The mathematical formula for this calculation should follow the agreed standard:  $\sum (x - \bar{x})^2 / n$ . Which DAX formula should you use?

- a) VAR.S
- b) VAR.P



66) Client provides you with SQL Server Analysis Service database connectivity with Multidimensional database structure. To import data use, Get Data -> SQL Server Analysis Service and data will be imported to Power BI. Is this statement correct?

a) False

b) True

67) Which of the following statements is true with regard to using the Slicer visual in a Power BI report?

a) A Slicer visual is used on Power BI reports to provide the report consumer with interactive filtering behavior.

b) When adding a field to the Field well of a Slicer visual, you can use either a column or a measure.

c) A Slicer visual from a Power BI report can be pinned to a dashboard to make the dashboard interactive.

68) What is the use of "Select Related Table" option while importing data from SQL Server?

a) It will not import any extra table or view.

b) It will import the tables that have similar schema.

c) It will also import views related to selected tables.

d) It will import tables that have physical relationship with selected table.

69) The marketing team needs a new dashboard to show the uptake of social users on the company's corporate forum. The dashboard will contain one particular report that shows the total number of users that registered for the site in each of the months of the year. For this report you want to create a dataset with a calculated column that displays the date with the abbreviated month name followed by the four-digit year e.g. Jan 2018. Which DAX expression should you use?

- a) `FORMAT( [RegistrationDate], "MMM yyyy" )`
- b) `FORMAT( [RegistrationDate], "mm yyyy" )`
- c) `FORMAT( [RegistrationDate], "MM yyyy" )`

70) Which of the following are advantages that Power BI dashboards have over Power BI reports?

- a) Dashboards provide a better interactive filtering and drill down experience.
- b) Dashboards support using the Natural Language Q&A features of Power BI.
- c) Dashboard provide support for data-driven alerts.
- d) Dashboards do not update automatically whenever the data in the underlying data set is updated.

71) When using the “Split Column by Delimiter” transformation, which option may result in more than two new columns?

- a) At the left-most delimiter
- b) None of the above
- c) At each occurrence of the delimiter.
- d) At the right-most delimiter

72) How do you connect to Excel files that contain target figures? The solution should involve minimum manual work when new Excel files are created.

- a) Connect to the files with Folder connector and use the Combine Binaries functionality
- b) Connect to a new file each month, perform transformations, and use Append function in Power Query Editor to combine all targets in the same table

73) Which of the following is not a reason for you to use calculated tables?

- a) To perform different types of merge join
- b) To improve the speed and performance of an existing table
- c) To union tables
- d) To create a table based on the result of a function or formula

74) Which of the following strategies are recommended when designing the queries to import data from an OLTP-style database into a Power BI Desktop project?

- a) Refactoring the imported tables into a star schema.
- b) Refactoring the imported tables into a multidimensional cube.
- c) Normalizing the data model to make it better suited for data analysis and reporting.

75) Which field is not available when creating a Pie chart visualization?

- a) Group
- b) Legend
- c) Value
- d) Details

76) Imagine you have created a query named Customers in a Power BI Desktop to append the rows from three external tables with customer data into a single output table named Customers. What would be the best approach to add a new fabricated ID column to the Customers table to ensure that every row in the Customers table contains a unique ID value?

- a) Modify the Customers query by adding an Index column
- b) Modify the data model by extending the Customers table with an Index column
- c) Modify the data model by extending the Customers table with a Counter column
- d) Modify the Customers query by adding a Counter column

77) What is the file size limit to publish a .PBIX file to Power BI Service Free?

- a) 3 GB
- b) 1 GB
- c) 10 GB
- d) No Limit

78) Which of the following visualization types do not support configuring dashboard alerts?

- a) Gauge
- b) Card
- c) Waterfall
- d) KPI

79) Which option does not allow you to hide a field from the Report view in Power BI Desktop?

- a) In Power BI Desktop Report view, right-click the field on the Fields list, and click Delete.
- b) In Power BI Desktop Data view, right-click the column header on the respective table and click Hide in Report View.
- c) In Power BI Desktop Relationships view, right-click the field on the respective table, and click Hide in Report View.
- d) In Power BI Desktop Report view, right-click the field on the Fields list, and click Hide.

80) In which of the following scenario refreshing an imported data set in the Power BI Service require either the on-premises gateway or a personal gateway?

- a) Refreshing a dataset which imports its data from a list in SharePoint Online.
- b) Refreshing a dataset which imports its data from an Azure SQL database.
- c) Refreshing a dataset which imports its data from an on-premises SQL Server database.

81) What do you need to do to create many-to-many relationship between 2 tables?

- a) Create relationship as normal and select Many to Many cardinality.
- b) Create a bridge table that contains unique values
- c) Join multiple columns of these tables.

82) Consider the following DAX formula for a calculated column in the Sales table:  $\text{UnitPrice} = \text{Sales [Revenue]} / \text{Sales [Units]}$ . Which statement does not describe the DAX formula?

- a) The formula creates a calculated column named UnitPrice.
- b) The value of the calculated column is dependent on the Revenue column.
- c) The value of the calculated column is dependent on the Units column.
- d) The Data type of the calculated column is Text.

83) Which of the following resources are automatically provisioned when you create a new app workspace in the Power BI Service?

- a) An Office 365 Group which triggers the creation of a SharePoint team site
- b) A shared capacity which is used to host the workspace
- c) A storage container for Power BI resources including datasets, reports, and dashboards
- d) An Azure Active Directory user account to serve as the workspace identity

84) Which of the following report page details are not recorded when you create a bookmark?

- a) The sort order of rows in a Table visual
- b) Whether a visual has been spotlighted or hidden
- c) The next page in the current bookmark collection's sequence
- d) The current selection(s) for each slicer on the page

85) Reports are often confused with dashboards since they too are canvases filled with visualizations. But there are some major differences. Which one allows you to filter, highlight, and slice, and also see data set tables and fields and values?

- a) Report
- b) Dashboard

86) Which two cross filter directions are available in Power BI table relationships?

- a) Double and Both
- b) Multiple and Both
- c) Both and Single
- d) Single and Double

87) You want to import data from Microsoft Access database to Power BI desktop but there is an error appearing on the screen. "The 'Microsoft.ACE.OLEDB.12.0' provider is not registered on the local machine". What is the reason for this error?

- a) Privacy is set to access database.
- b) Access database is password protected.
- c) Provider is not installed in the system.
- d) Database name is wrong

88) Which of the following platforms do not support R visuals?

- a) Power BI Mobile APP (for reports hosted on app.powerbi.com)
- b) Power BI Service
- c) Reports hosted on Power BI Embedded (V2)
- d) Publish to Web
- e) Power BI Desktop



89) You are the BI developer at Adventure Works responsible for enabling report creation and sharing by business users. Currently, there is an on-premises data warehouse built with SQL Server 2017, and there are some files stored on a shared drive that contain sales targets. The files are updated manually on a weekly basis. All reports need to be refreshed automatically at-least once a day. Everyone in the organization has a Power BI Pro license. Adventure Works has a hot-desking policy, and all employees must lock their laptops in allocated cabinets. Some business users would like to be able to create their own reports and share them internally. Only a select group of users must have the rights to share reports externally. Adventure Works has a separate manager for each product category. One of the reports must be secured in such a way that each manager must be able to see the products of the category they manage only, while the CEO must be able to see all sales. An HR analyst maintains a table that maps the category name to the manager email address. The management requested your assistance in making sure that business users can create and share their Power BI reports within the organization. Based on background information and business requirements, answer the following question Business users ask your guidance on how they should configure automatic refresh. Which gateway installation mode is appropriate for Adventure Works?

a) On-Premises Data Gateway.

b) On-Premises Data Gateway (Personal Mode)

90) The management requested two Power BI reports to be produced: one that shows all sales data, including transactions that happened in the past 10 minutes, and another report that tracks historical targets versus actual figures for the past 12 months. Historical report is prepared at the beginning of every month. Based on background information and business requirements, answer the following questions: Which data connectivity mode should you use for each report?

- a) DirectQuery for both
- b) Import data for both
- c) DirectQuery for the historical data report, Import data for the sales targets report
- d) DirectQuery for the sales report, Import data for the historical data report

91) Which of the following cardinalities are not available in Power BI table relationships?

- a) Many to Single
- b) One to Many
- c) One to One
- d) Many to Many

92) The following table contains a Parent-Child hierarchy on the columns: Employee Key and Parent Employee Key. From the table you can see that employee 112 has no parent defined, employee 14 has employee 112 as manager (ParentEmployeeKey), employee 3 has employee 14 as manager and employees 11, 13, and 162 have employee 3 as manager. The above helps to understand that employee 112 has no manager above her/him, and she/he is the top manager for all employees. The PATHLENGTH Function (DAX) returns the number of levels in a given PATH (), starting at the current level until the oldest or topmost parent level. What would be the PATHLENGTH value for the third row below (values 3 and 14)?

Employee Key	Parent Employee Key
112	
14	112
3	14
11	3
13	3
162	3
117	162
221	162
81	162

- a)3
- b)2
- c)4
- d)5



93) Which of the following operations cannot be accomplished by a developer using the Power BI Service API (aka Power BI REST API) ?

- a) Refreshing an imported dataset
- b) Creating a new dataset
- c) Retrieving rows from an existing dataset
- d) Adding rows to an existing dataset

94) Which of the following is true for creating a column from an example?

- a) It will list the examples defined by Power BI and you can select anyone to create new column.
- b) You can create column from the examples that you have defined already
- c) When you type 1 or more values in a column, Power BI analyzes if that value matches the data from selected columns or all columns in the table then it will fill remaining column values according to the matched criteria.

95) Which of the following is not a possible option to share a dashboard with other users?

- a) Click Share from the upper right of the dashboard you want to share.
- b) From the dashboard list, click share button from actions tab
- c) From your browser, click Share.
- d) Click the ellipsis next to the dashboard name on the Dashboards list, and then click Share.

96) When using Live Connection, what type of transformations can be applied to data?

- a) None of Them
- b) Transpose
- c) Unpivot Columns
- d) Add Custom Column

97) You are asked to create a report with the population data from a public website. To get population data in Power BI from public website: Select Get Data -> Web -> Paste Website Link -> Click connect in Anonymous tab. Then in the navigation pane select table that you want to import to Power BI. Do these steps fulfill the requirement to import data from a public website to Power BI?

- a) Yes
- b) No

98) Which of the following is not an advantage of installing Power BI Desktop from the Microsoft Store instead of installing it using the standard MSI download?

- a) It lowers the total cost of ownership (TCO) for an organization's IT department when distributing Power BI Desktop to a large audience.
- b) Monthly updates for Power BI Desktop are automatically installed in the background when they're available.
- c) Installation does not require administrative privileges.
- d) It provides Power BI Desktop with greater access to content in Office 365 and Microsoft Azure.

99) Which views is not available in Power BI Desktop?

- a) Dashboard
- b) Data
- c) Relationships
- d) Report

100) What are the limitations of live connection?

- a) Need extra steps to share reports with users with free Power BI license.
- b) Some visuals are not supported in live connection mode
- c) Transformation cannot be applied to data.

101) Which command in the Power BI Desktop query editor is used to create a new query that uses the output of another query as its input source?

- a) Pipe
- b) Reference
- c) Duplicate
- d) Map

102) When connecting to an Access database, which entities are shown in the Navigator window?

- a) Users from the Access database
- b) Tables from the Access database.
- c) Columns from the Access database
- d) Rows in from Access database

103) Which statement does not describe the Applied Step's area in the Query Editor window?

- a) You can modify the connection to the data source by modifying the Source step settings.
- b) It records the list of steps from connecting to the data source to all the steps applied to the data.
- c) The recorded list is based on the step that has the least effect to the step that has the most effect to the data source.
- d) The recorded list follows the sequence of steps applied to the data source.

104) Which of the following statement is not true with regard to designing Power BI content for mobile devices?

- a) The Power BI service dashboard designer provides Phone view in the browser to design dashboards which target mobile devices
- b) The Power BI Desktop report designer provides Phone Layout View to design reports which target mobile devices.
- c) The Power BI Service report designer provides Phone Layout View in the browser to design reports which target mobile devices.
- d) The Power BI Desktop dashboard designer provides Phone view to design dashboards which target mobile devices.

105) The DAX FORMAT function converts a value to text according to the specified format provided as the second argument to the function. Which of the following DAX expression formats the number to display 20.00%?

- a) FORMAT (0.2, "p")
- b) FORMAT (0.2, "%")
- c) FORMAT (0.2, "Percent")
- d) FORMAT (20, "Percent")

106) Your company wants you to prepare a dashboard that shows the reports for 10 years of sales data. These reports will be used by company directors to see the monthly sales performance. You need to get data of 10 years from SQL server database. Is Direct Query best option to use in this scenario?

- a) Yes
- b) No

107) After you have pinned a report visual to create a dashboard tile, you can later modify the visual's properties and the Power BI service will automatically update the dashboard tile with the new visual property values.

- a) False
- b) True



108) Data has been scraped from a table on a popular retirement website. However, the Health care quality column's scores were not automatically transformed from text to numbers when Query Editor loaded the table. You thus right clicked the column header, and selected Change Type > Whole Number to change them. Unfortunately, the Health care quality column contains a few times in states' rankings, which was noted on the website by the word (tie) after their numbers. Query Editor thus reports a few errors. What is the consequence of using the Remove Errors option (ribbon or the right-click menu option) to resolve this?

- a) Removes the applied step that has errors
- b) Change the errors values to blank
- c) Removes any rows with errors
- d) Removes the error warnings but keeps all data

109) To create a DAX formula that automatically calculates the previous month number as calculated column, for example if the month is 6 then formula should return 5. Month columns is calculated from date with formula below. Month = MONTH (Sales [Date]), Which of the following DAX formulas returns correct number for previous month?

- a) Previous Month = PREVIOUSMONTH(Sales [Month])
- b) Previous Month = Sales [Month]-1
- c) Previous Month = STARTOFMONTH(Sales [Month])-1
- d) Previous Month = IF (Sales [Month] =1, 12, Sales [Month]-1)

110) After you have pinned a report visual to create a dashboard tile, you can later modify the visual's properties and the Power BI service will automatically update the dashboard tile with the new visual property values.

a) False

b) True

111) How to create a chart by "Asking Question" feature?

a) Home -> Ask Question

b) Modeling -> Ask Question

112) Into which of the following scopes can you import a custom visual created for Power BI?

a) Into the scope of an app workspace

b) Into the scope of a premium capacity

c) Into the scope of your personal workspace

d) Into the scope of a Power BI Desktop project

113) What can you accomplish with data gateway?

a) View Report

b) Download Report

c) Refresh Data

d) Report Publish

114) What happens when you click on Focus mode of a tile in Power BI dashboard?

- a) The tile you selected expands and takes the full space
- b) The Power BI desktop file gets downloaded
- c) The report from which the tile was pinned opens.
- d) The Power BI desktop file opens.

115) You created a line chart that shows Quantity by Month and noticed month values are sorted alphabetically. How can you rectify this? Your solution should involve minimal effort.

- a) Use the ellipsis menu in the visual to change the sort order.
- b) Create a measure for each month and place them in the right order.
- c) Create a Month Number column from Date or Month Name then use the Sort by Column feature in Modeling Tab and sort Month by Month Number.

116) What is the purpose of the new Selection pane in the report designer in Power BI Desktop?

- a) It is used to control the tab order between visuals on a page.
- b) It is used to select data in a visual for highlighting and drill down
- c) It is used to combine two or more visuals on a page into a visual group.
- d) It is used to hide and show visuals on a page before recording a bookmark

117) What is the difference between "Choose Columns" and "Go to column" features?

- a) "Choose Columns" helps to select a column. "Go to Column" removes deselected columns.
- b) Both provide same functionality but with different name.
- c) "Choose columns" removes deselected column, "Go to Column" helps to navigate to specific column in large dataset.

118) Which of the following statement best describes the use case for Power BI embedded?

- a) Embedding Power BI tiles/ reports onto Power BI service for internal users
- b) Embedding Power BI tiles/ reports into e-mail messages
- c) Embedding Power BI tiles/ reports onto dashboards which can be shared by others in your organization
- d) Embedding Power BI tiles/ reports into your company portal/external facing website customers/external users to access

119) What does the option "Assume Referential Integrity" in Power BI Desktop mean (When creating relationships between tables)?

- a) It automatically assumes that your relationship is 1:1 (Rather than 1: Many or Many:1)
- b) It allows for calculated columns to be used as the relationship column between two tables
- c) It enables queries on the data source to use INNER JOIN rather than OUTER JOIN which improves query efficiency
- d) It assumes that there are no blank or null values in any of the data tables in the relationships



120) As part of a large HR project you are working with a dataset of company employees, both past and present. The data includes columns for EthnicGroup, PayTypeID, HireDate (the date they started work), TermDate (the date they left) and several other columns. You want to create a new Calculated Column that determines if the person was a bad hire based on a set of rules. If they were a bad hire then the result is 1, otherwise the Calculated Column displays a zero. The bad hire rule is: BadHire = If the person stayed at the company less than 61 days Example: If a person joined the company on 27th June 2013 and left on 21st August 2013, then they would be a bad hire. Which DAX expression would you use for this Calculated Column?

- a)  $\text{IF}(\text{OR}(((\text{HireDate}] - [\text{TermDate}])) < = 61, \text{ISBLANK}([\text{TermDate}]))), 0, 1)$
- b) Slicer
- c)  $\text{IF}(((\text{TermDate}] - [\text{HireDate}]) * -1) < = 61, 0, 1)$
- d)  $\text{IF}((((\text{HireDate}] - [\text{TermDate}]) * -1) < 61), 1, 0)$

121) Which data category setting is used to geographically map column values to United States cities when the column contains values in city, state format such as Dallas, TX and Tampa, FL?

- a) City
- b) Place
- c) Address
- d) State or Province

122) What is the function of Row Level Security in Power BI?

- a) Ability to link Power BI log-in to your organizational Active Directory/Windows login via Single Sign on
- b) Assignment of security permissions on the underlying Power BI Azure SQL database
- c) Restrict data access for given users (by assigning users to roles)
- d) Restriction to particular measures within Power BI reports to particular users

123) You have four queries named Query 1, Query 2, Query 3, and Query 4 in the Power BI desktop. You are creating Query 5, which will be appended at the end of Query 3. When you load the data, which queries will be refreshed?

- a) Query 1 to Query 5
- b) Query 3 and Query 5
- c) Only Query 5
- d) Query 1 to Query 4

124) All office 365 Global admins and Power BI admins are automatically capacity admins of both Power BI Premium capacity and Power BI embedded capacity

- a) True
- b) False

125) Duplicating a query increases the size of dataset and referencing a query doesn't increase. Is this statement correct?

- a) Yes
- b) No

126) You need a Power BI Pro license to share your dashboard but those you share it with do not need a license. When you share a dashboard, they can view it and interact with it, but can't edit it. They see the same data that you see in the dashboard and reports unless row-level security (RLS) is applied to the underlying dataset. The colleagues you share it with can share the dashboard with their colleagues, if you allow them to. Is this statement true?

- a) True
- b) False

127) Which of the following actions can you take to get advantage of Power BI Premium?

- a) Configure one or more app workspaces to run within the scope of a Premium capacity.
- b) Modify the Premium Enabled setting of a dataset.
- c) Modify the Premium Enabled setting of a report or dashboard.
- d) Configure one or more app workspaces to run within the scope of a Shared capacity.

128) Which feature of query editor splits a query into parts?

- a) Format Query
- b) Extract Previous
- c) Split Query

129) Which types of datasets can be used to create a dashboard with streaming data tiles?

- a) Streaming Datasets and Hybrid Datasets
- b) DirectQuery Datasets and Streaming Datasets
- c) Hybrid Datasets and Push Datasets
- d) Push Datasets and Streaming Datasets

130) Which of the following is not a limitation of publishing a report to website?

- a) Custom visuals are not supported
- b) Row level security won't work.
- c) R visuals are not supported
- d) Reports that connect live to on-premises Analysis Services Tabular are not supported.

131) What is the purpose of Power BI Personal Gateway?

- a) To provide a platform for easily consuming and sharing reports.
- b) To provide quick and secure data transfer between Power BI service and on-premises data sources that support refresh.
- c) To enable publishing reports to Power BI service.
- d) To connect and shape data, build robust models, and author well-structured reports.



132) You have loaded data from a database table which contains a list of filenames that have been processed by an internal team. One particular column called filename contains the name of each file processed e.g. example.abc123.xml Which Transform function will dissect the filename values into two separate columns, one for the filename and the other for the file extension e.g. XML

- a) Extract – Text before delimiter
- b) Extract – Text after delimiter
- c) Split Column – Split at Right-most delimiter
- d) Split Column – Split at Each occurrence of the delimiter

133) Power BI doesn't have an R engine built into it; you need to have an installation of R on your machine in order to generate/use R visuals. Is this statement TRUE?

- a) False
- b) True

134) Which options cannot be added as a group member?

- a) Email addresses
- b) Computer Name
- c) Distribution Lists
- d) Security groups

135) Which visual shows the progress toward a particular target?

- a) Gauge
- b) Waterfall
- c) Scatter chart
- d) Bar chart

136) Moving a query into group increases the performance of the query. Is this statement correct?

- a) No
- b) Yes

137) Which DAX function removes filters from a table?

- a) Remove
- b) All
- c) Except
- d) AllExcept

138) Which of the following is not a valid type when programming in the M language?

- a) Record
- b) Function
- c) Dataframe
- d) List

139) Consider the following custom column formula: = if [Country] = "USA" then "United States" else [Country] Which of the following statements describes the value of the custom column formula?

- a) The value will be the same as the Country column.
- b) The value will be "United States".
- c) The value will be "USA".
- d) The value will either be "United States" or whatever the value of the Country column is.

140) The account you use for registering an app for embedding Power BI content doesn't need a Power BI Pro license allocated to it. Is this statement true?

- a) Yes
- b) No

141) Which of the following statements is false with respect to setting the Cross-filter Direction property for a table relationship based on two tables with a one-to-many relationship?

- a) When the Cross-filter Direction is set to Both, the tabular database engine will propagate the context filter in both directions.
- b) When the Cross-filter Direction is set to Single, the tabular database engine will only propagate the context filter in one direction from the one-side table to the many-side table.
- c) There are cases where setting the Cross-filter Direction to Both is not allowed because it creates an ambiguity that cannot be resolved.
- d) When the Cross-filter Direction is set to Single, the tabular database engine will only propagate the context filter in one direction from the many-side table to the one-side table.

142) The CEO wants to share the environmental report created in Power BI with external users. The report does not contain any sensitive data. How can this be achieved? Your solution must involve minimal effort.

- a) Invite the external users in Adventure Works Active Directory.
- b) Add the external users into an app workspace.
- c) Use Publish to Web feature.

143) You publish a report from Power BI Desktop to Power BI service. You then make changes to your local report in Power BI Desktop by adding some visualizations. When do these changes synchronize to Power BI service?

- a) On scheduling refresh is run on Power BI service
- b) On Re-publishing the Power BI Desktop report
- c) On saving the Power BI Desktop file
- d) On clicking REFRESH NOW in Power BI service

144) Is Q&A, Cortana and External Sharing is disabled for Power BI Reports that use Row Level Security (RLS)?

- a) False
- b) True

145) Which of the following option modifies the interaction between visuals in a Power BI report?

- a) Arrange
- b) Edit Interactions
- c) Edit Queries
- d) Page Size

146) What are the types of row context?

- a) Function Context and Filter Context
- b) Filter Context and Row Context
- c) Row Context and Function Context

147) Power BI tries to translate transformations into the data source's native language where possible. What is this step called?

- a) Native Query View
- b) Query Dependency
- c) Query folding

148) Some of the most powerful data analysis solutions in Power BI Desktop can be created by using measures. Measures help us by performing calculations on our data as we interact with our reports. Understanding aggregations is fundamental to understanding measures because every measure will perform some type of aggregation. Which of the below is false regarding measures in Power BI?

- a) Every time you interact with your report, you are changing the row context in which a measure calculates and displays its results
- b) You can reference another measure in a DAX expression by just typing an opening bracket "["
- c) You can create a new measure by clicking on the New Measure button in the ribbon on Power BI Desktop's Home tab

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