



Microsoft

Exam Questions DP-500

Designing and Implementing Enterprise-Scale Analytics Solutions Using Microsoft Azure and Microsoft Power BI

NEW QUESTION 1

- (Exam Topic 3)

You plan to generate a line chart to visualize and compare the last six months of sales data for two departments. You need to increase the accessibility of the visual. What should you do?

- A. Replace long text with abbreviations and acronyms.
- B. Configure a unique marker for each series.
- C. Configure a distinct color for each series.
- D. Move important information to a tooltip.

Answer: C

Explanation:

Themes, contrast and colorblind-friendly colors.

You should ensure that your reports have enough contrast between text and any background colors. Certain color combinations are particularly difficult for users with color vision deficiencies to distinguish.

These include the following combinations:

green and red green and brown blue and purple green and blue

light green and yellow blue and grey

green and grey green and black

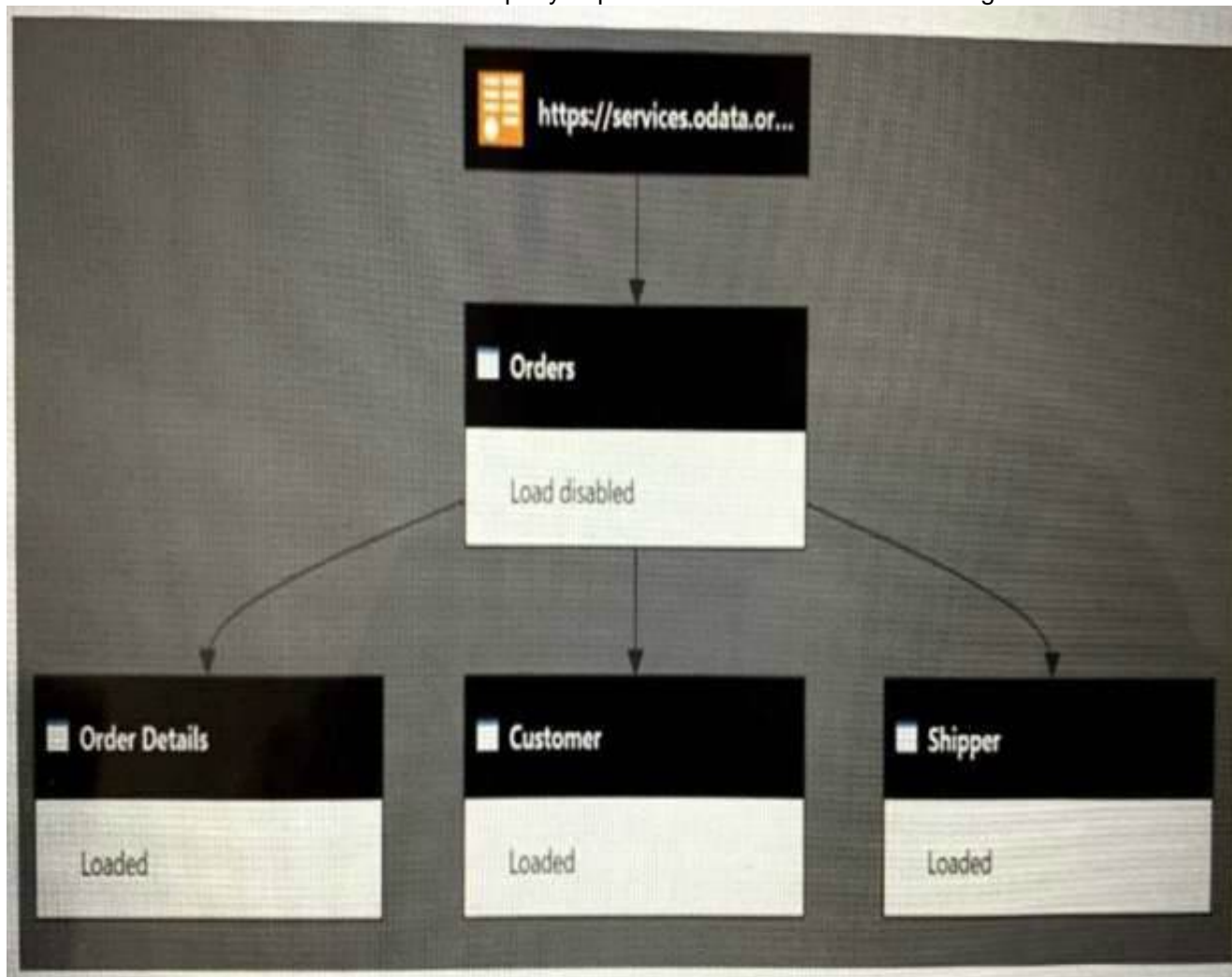
Avoid using these colors together in a chart, or on the same report page.

Reference: <https://docs.microsoft.com/en-us/power-bi/create-reports/desktop-accessibility-creating-reports>

NEW QUESTION 2

- (Exam Topic 3)

You have a Power BI dataset that has the query dependencies shown in the following exhibit.



Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.

NOTE: Each correct selection is worth one point.

Answer Area

When the dataset refreshes, the orders query will be executed [answer choice] times.

[Answer choice] will reduce data refresh times for this model.

0
1
3

Duplicating the Orders query instead of referencing the query
 Replacing the Orders query with a dataflow
 Using Table.Buffer in the Orders query

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: 3

Power Query doesn't start at the first query and work down, it starts at the bottom (last) query and works backwards, so 3 tables from 1 will cause it to process that first source table 3 times.

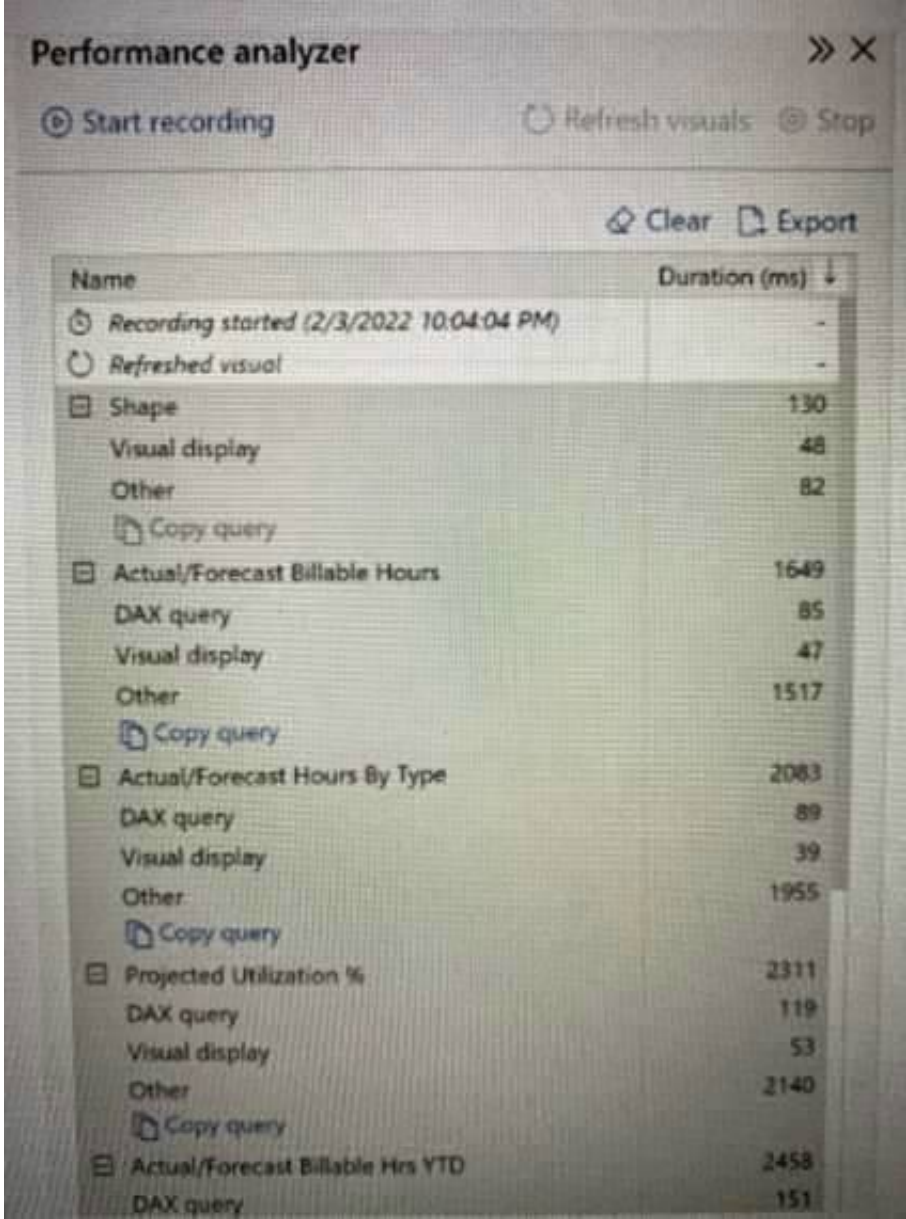
Box 2: Using Table.Buffer in the Orders query

Table.Buffer buffers a table in memory, isolating it from external changes during evaluation. Buffering is shallow. It forces the evaluation of any scalar cell values,

but leaves non-scalar values (records, lists, tables, and so on) as-is.
Note that using this function might or might not make your queries run faster. In some cases, it can make your queries run more slowly due to the added cost of reading all the data and storing it in memory, as well as the fact that buffering prevents downstream folding.
Example 1
Load all the rows of a SQL table into memory, so that any downstream operations will no longer be able to query the SQL server.
Usage let
Source = Sql.Database("SomeSQLServer", "MyDb"), MyTable = Source{[Item="MyTable"]}[Data], BufferMyTable = Table.Buffer(dbo_MyTable)
in BufferMyTable Output
Reference: <https://radacad.com/performance-tip-for-power-bi-enable-load-sucks-memory-up> <https://docs.microsoft.com/en-us/powerquery-m/table-buffer>

NEW QUESTION 3

- (Exam Topic 3)
You open a Power BI Desktop report that contains an imported data model and a single report page.
You open Performance analyzer, start recording, and refresh the visuals on the page. The recording produces the results shown in the following exhibit



- What can you identify from the results?
- A. The Actual/Forecast Hours by Type visual takes a long time to render on the report page when the data is cross-filtered.
 - B. The Actual/Forecast Billable Hrs YTD visual displays the most data.
 - C. Unoptimized DAX queries cause the page to load slowly.
 - D. When all the visuals refresh simultaneously, the visuals spend most of the time waiting on other processes to finish.

Answer: D

Explanation:

Most time is spent in the category Other - time required by the visual for preparing queries, waiting for other visuals to complete, or performing other background processing.
Note: Each visual's log information includes the time spent (duration) to complete the following categories of tasks:
DAX query - if a DAX query was required, this is the time between the visual sending the query, and for Analysis Services to return the results.
Visual display - time required for the visual to draw on the screen, including time required to retrieve any web images or geocoding.
Other - time required by the visual for preparing queries, waiting for other visuals to complete, or performing other background processing.
Reference: <https://docs.microsoft.com/en-us/power-bi/create-reports/desktop-performance-analyzer>

NEW QUESTION 4

- (Exam Topic 3)
You use the Vertipaq Analyzer to analyze tables in a dataset as shown in the Tables exhibit. (Click the Tables tab.)

VertiPaq Analyzer Metrics						
Tables Columns Relationships Partitions Summary						
Name	Cardinality	Table Size	Col Size	Data	Dictionary	Hier Size
Plan	627,876	22,823,464	21,147,552	6,697,272	10,293,184	4,157,096
Forecast Amount	101,606	22,823,464	7,400,920	1,475,640	5,112,384	812,896
Budget Amount	101,596	22,823,464	7,400,024	1,475,640	5,111,568	812,816
Row ID	627,876	22,823,464	4,185,992	1,674,344	120	2,511,528
ProductKey	628	22,823,464	842,296	818,016	19,208	5,072
Sales	858,789	20,968,092	18,674,660	12,182,384	2,587,004	3,905,272
Row ID	858,789	20,968,092	5,725,408	2,290,112	120	3,435,176
SalesAmount	36,554	20,968,092	2,960,560	1,245,904	1,422,176	292,480
TotalCost	9,711	20,968,092	1,924,272	1,238,488	608,056	77,728
Sales ID	2,000	20,968,092	1,431,192	1,374,064	41,080	16,048
Date	1,095	20,968,092	1,428,968	1,373,856	46,312	8,800

The table relationships for the dataset are shown in the Relationships exhibit. (Click the Relationships tab.)

VertiPaq Analyzer Metrics						
Tables Columns Relationships Partitions Summary						
Table / Relationship	Size	Max From Cardinality	Max To Cardinality	1:M Ratio %	Missing Keys	
Plan	1,675,912	627,876	858,789	136.78%	7	
Plan[ProductKey] ↔ 1 Product[ProductKey]	848	628	629	0.10%	0	
Plan[StoreKey] ↔ 1 Store[Store Key]	360	306	299	0.05%	7	
Plan[GeographyKey] ↔ 1 Geography[GeographyKey]	312	263	263	0.04%	0	
Plan[DateKey] ↔ 1 Month & Year Distinct[Date]	32	36	36	0.01%	0	
Sales	2,293,432	858,789	1,095	0.13%	858,793	
Sales[Date] ↔ 1 Calendar[Date]	1,760	1,095	1,095	0.13%	0	
Sales[GeographyKey] ↔ 1 Geography[GeographyKey]	312	263	263	0.03%	0	
Sales[PromotionKey] ↔ 1 Promotion[Promotion Key]	24	28	28	0.00%	0	
Sales[channelKey] ↔ 1 Channel[ChannelKey]	8	4	4	0.00%	0	
Sales[Row ID] ↔ 1 Plan Header Details[Row ID]	0	858,789	3	0.00%	858,786	

You need to reduce the model size by eliminating invalid relationships. Which column should you remove?

- A. Sales[Sales Amount]
- B. Sales[RowID]
- C. Sales[Sales ID]
- D. Plan[RowID]

Answer: B

Explanation:

Sales[Row ID] has 858,786 missing keys and 858,789 Max From Cardinality.

Note: The Max From Cardinality column defines the cost of the relationship which is the amount of time DAX needs to transfer the filters from the dimensions table to the fact table.

Reference: https://blog.enterprisedna.co/vertipaq-analyzer-tutorial-relationships-referential-integrity/

NEW QUESTION 5

- (Exam Topic 3)

You have a Power BI dataset. The dataset contains data that is updated frequently. You need to improve the performance of the dataset by using incremental refreshes.

Which four actions should you perform in sequence to enable the incremental refreshes? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions

Define the incremental refresh policy for the table.

Enable query caching.

Publish the model to the Power BI service.

Create RangeStart and RangeEnd parameters.

Use the Power BI REST API to post a message to /refreshes.

Apply a custom Date/Time filter to the data.

Answer Area

A. Mastered

B. Not Mastered

Answer: A

Explanation:

Graphical user interface, text, application, chat or text message Description automatically generated

Step 1: Create RangeStart and RangeEnd parameters. Create parameters

In this task, use Power Query Editor to create RangeStart and RangeEnd parameters with default values. The default values apply only when filtering the data to be loaded into the model in Power BI Desktop. The values you enter should include only a small amount of the most recent data from your data source. When published to the service, these values are overridden by the incremental refresh policy.

Step 2: Apply a custom Date/Time filter to the data. Filter data

With RangeStart and RangeEnd parameters defined, apply a filter based on conditions in the RangeStart and RangeEnd parameters.

Before continuing with this task, verify your source table has a date column of Date/Time data type. Step 3: Define the incremental refresh policy for the table.

Define policy

After you've defined RangeStart and RangeEnd parameters, and filtered data based on those parameters, you define an incremental refresh policy. The policy is applied only after the model is published to the service and a manual or scheduled refresh operation is performed.

Step 4: Publish the model to the Power BI service. Save and publish to the service

When your RangeStart and RangeEnd parameters, filtering, and refresh policy settings are complete, be sure to save your model, and then publish to the service.

Reference: <https://docs.microsoft.com/en-us/power-bi/connect-data/incremental-refresh-configure>

NEW QUESTION 6

- (Exam Topic 3)

You have a Power BI report that contains the table shown in the following exhibit.

Store ID	Store	Returns	
6	Leo	\$6,108	Red
5	Fama	\$6,097	Red
13	Contoso	\$5,214	Red
11	Pomum	\$4,968	Yellow
7	VanArsdel	\$4,964	Yellow
10	Pirum	\$4,644	Yellow
2	Aliqui	\$4,479	Yellow
1	Abbas	\$4,070	Yellow
8	Natura	\$3,376	Yellow
14	Victoria	\$2,317	Green
4	Salvus	\$2,296	Green
12	Quibus	\$2,208	Green
3	Barba	\$1,601	Green
Total		\$52,342	

The table contains conditional formatting that shows which stores are above, near, or below the monthly quota for returns. You need to ensure that the table is accessible to consumers of reports who have color vision deficiency. What should you do?

- A. Add alt text to explain the information that each color conveys.
- B. Move the conditional formatting icons to a tooltip report.
- C. Change the icons to use a different shape for each color.
- D. Remove the icons and use red, yellow, and green background colors instead.

Answer: A

Explanation:

Report accessibility checklist, All Visuals.

* Ensure alt text is added to all non-decorative visuals on the page.

* Avoid using color as the only means of conveying information. Use text or icons to supplement or replace the color.

* Check that your report page works for users with color vision deficiency.

* Etc.

Reference: <https://docs.microsoft.com/en-us/power-bi/create-reports/desktop-accessibility-creating-reports>

NEW QUESTION 7

- (Exam Topic 3)

You have a file named File1.txt that has the following characteristics:

- A header row
- Tab delimited values
- UNIX-style line endings

You need to read File1.txt by using an Azure Synapse Analytics serverless SQL pool. Which query should you execute?

- A. `SELECT*`
`FROM OPENROWSET (`
`BULK 'file1.txt',`
`DATA_SOURCE = 'Sql1',`
`FORMAT = 'CSV', PARSER_VERSION = '2.0',`
`FIELDTERMINATOR = '\t',`
`ROWTERMINATOR = '0x0a',`
`FIRSTROW= 2`
`)`
- B. `SELECT*`
`FROM OPENROWSET (`
`BULK 'file1.txt',`
`DATA_SOURCE = 'Sql1',`
`FORMAT = 'CSV', PARSER_VERSION = '2.0',`
`FIELDTERMINATOR = ',',`
`ROWTERMINATOR = '\n',`
`FIRSTROW= 2`
`)`
- C. `SELECT*`
`FROM OPENROWSET (`
`BULK 'file1.txt',`
`DATA_SOURCE = 'Sql1',`
`FORMAT = 'CSV', PARSER_VERSION = '2.0',`
`FIELDTERMINATOR = ',',`
`ROWTERMINATOR = '0x0a',`
`FIRSTROW= 2`
`)`
- D. `SELECT*`
`FROM OPENROWSET (`
`BULK 'file1.txt',`
`DATA_SOURCE = 'Sql1',`
`FORMAT = 'CSV', PARSER_VERSION = '2.0',`
`FIELDTERMINATOR = '\t',`
`ROWTERMINATOR = '0x0a',`
`FIRSTROW= 1`
`)`

- A. Option A
B. Option B
C. Option C
D. Option D

Answer: A

Explanation:

Use FIELDTERMINATOR = '\t' for tab.

Use ROWTERMINATOR = '0x0A ' for UNIX-style line endings Use FIRSTROW= 2 for a header row

Note: Using Row Terminators

The row terminator can be the same character as the terminator for the last field. Generally, however, a distinct row terminator is useful. For example, to produce tabular output, terminate the last field in each row with the newline character (\n) and all other fields with the tab character (\t).

If you want to output a line feed character only (LF) as the row terminator - as is typical on Unix and Linux computers - use hexadecimal notation to specify the LF row terminator. For example:

`bcp -r '0x0A' FIRSTROW`

`FIRSTROW=first_row` Specifies the number of the first row to load. The default is 1. This indicates the first row in the specified data file. The row numbers are determined by counting the row terminators. `FIRSTROW` is 1-based.

Reference:

<https://docs.microsoft.com/en-us/sql/relational-databases/import-export/specify-field-and-row-terminators-sql-se>

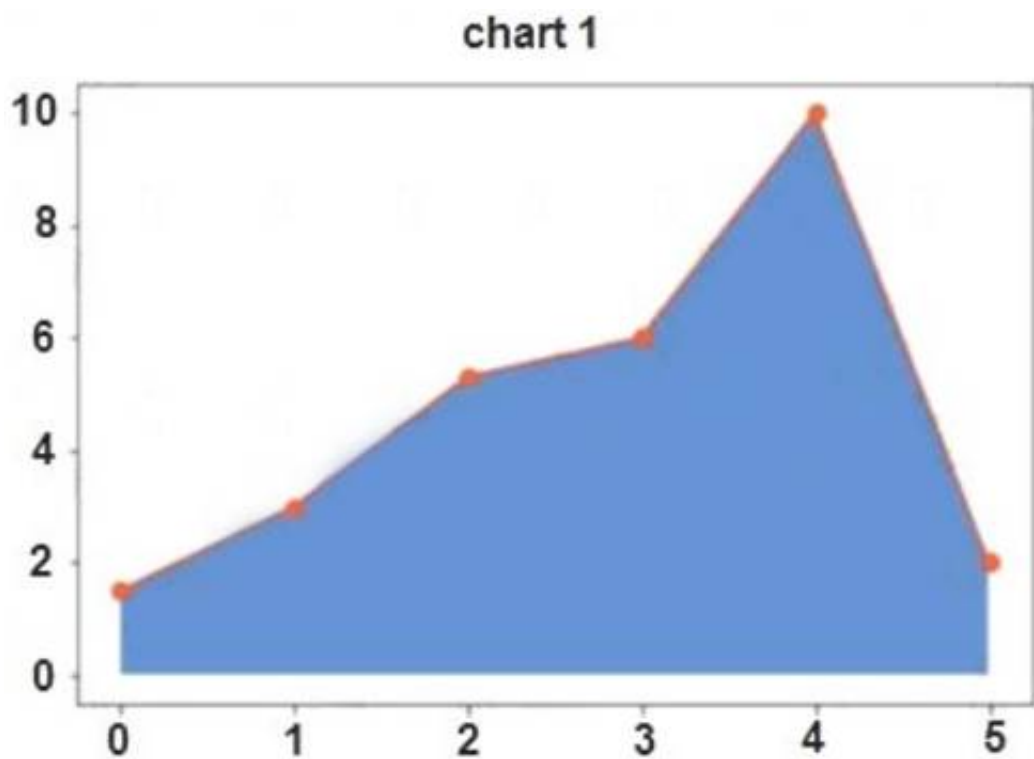
<https://docs.microsoft.com/en-us/sql/t-sql/functions/openrowset-transact-sql>

NEW QUESTION 8

- (Exam Topic 3)

You have an Azure Synapse notebook.

You need to create the visual shown in the following exhibit.



How should you complete the code? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

```
import matplotlib.pyplot as plt
x = [0, 1, 2, 3, 4, 5]
y = [1.5, 3, 5.3, 6, 10, 2]
plt.plot(x, y, '-o', color='red')
plt. (x, y)
plt. ('chart 1', fontweight='bold')
plt.show()
```

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: fill_between
atplotlib.pyplot.fill_between fills the area between two horizontal curves.
The curves are defined by the points (x, y1) and (x, y2). This creates one or multiple polygons describing the filled area.
Box 2: subtitle
Set the title of the visual.
subtitle adds a centred title to the figure. Reference:
https://matplotlib.org/3.1.1/api/_as_gen/matplotlib.pyplot.fill_between.html#matplotlib.pyplot.fill_between
https://matplotlib.org/3.1.1/api/_as_gen/matplotlib.pyplot.subtitle.html#matplotlib.pyplot.subtitle

NEW QUESTION 9

- (Exam Topic 3)
You have an Azure Synapse Analytics serverless SQL pool.
You need to catalog the serverless SQL pool by using Azure Purview.
Which three actions should you perform? Each correct answer presents part of the solution. NOTE: Each correct selection is worth one point.

- A. Create a managed identity in Azure Active Directory (Azure AD).
- B. Assign the Storage Blob Data Reader role to the Azure Purview managed service identity (MSI) for the storage account associated to the Synapse Analytics workspace.
- C. Assign the Owner role to the Azure Purview managed service identity (MSI) for the Azure Purview resource group.
- D. Register a data source.
- E. Assign the Reader role to the Azure Purview managed service identity (MSI) for the Synapse Analytics workspace.

Answer: ABE

Explanation:

Authentication for enumerating serverless SQL database resources

There are three places you'll need to set authentication to allow Microsoft Purview to enumerate your serverless SQL database resources:

- The Azure Synapse workspace
- The associated storage
- The Azure Synapse serverless databases

The steps below will set permissions for all three. Azure Synapse workspace

In the Azure portal, go to the Azure Synapse workspace resource. On the left pane, select Access Control (IAM).

Select the Add button.

Set the Reader role and enter your Microsoft Purview account name, which represents its managed service identity (MSI).

Select Save to finish assigning the role

Azure Synapse Analytics serverless SQL pool catalog Purview Azure Purview managed service identity Storage account

In the Azure portal, go to the Resource group or Subscription that the storage account associated with the Azure Synapse workspace is in.

On the left pane, select Access Control (IAM). Select the Add button.

Set the Storage blob data reader role and enter your Microsoft Purview account name (which represents its MSI) in the Select box.

Select Save to finish assigning the role. Azure Synapse serverless database

Go to your Azure Synapse workspace and open the Synapse Studio. Select the Data tab on the left menu.

Select the ellipsis (...) next to one of your databases, and then start a new SQL script.

Add the Microsoft Purview account MSI (represented by the account name) on the serverless SQL databases. You do so by running the following command in your SQL script:

```
SQL
CREATE LOGIN [PurviewAccountName] FROM EXTERNAL PROVIDER;
```

Apply permissions to scan the contents of the workspace

You can set up authentication for an Azure Synapse source in either of two ways. Select your scenario below for steps to apply permissions.

- Use a managed identity
- Use a service principal

Reference: <https://docs.microsoft.com/en-us/azure/purview/register-scan-synapse-workspace?tabs=MI>

NEW QUESTION 10

- (Exam Topic 3)

You have an Azure Synapse Analytics dedicated SQL pool.

You need to ensure that the SQL pool is scanned by Azure Purview. What should you do first?

- A. Register a data source.
- B. Search the data catalog.
- C. Create a data share connection.
- D. Create a data policy.

Answer: B

NEW QUESTION 10

- (Exam Topic 3)

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You are using an Azure Synapse Analytics serverless SQL pool to query a collection of Apache Parquet files by using automatic schema inference. The files contain more than 40 million rows of UTF-8-encoded business names, survey names, and participant counts. The database is configured to use the default collation.

The queries use open row set and infer the schema shown in the following table.

name	system_type_name	max_length
businessName	varchar(8000)	8000
surveyName	varchar(8000)	8000
participants	int	4

You need to recommend changes to the queries to reduce I/O reads and tempdb usage.

Solution: You recommend using openrowset with to explicitly define the collation for businessName and surveyName as Latin1_Generai_100_BiN2_UTF8.

Does this meet the goal?

- A. Yes
- B. No

Answer: A

Explanation:

Query Parquet files using serverless SQL pool in Azure Synapse Analytics. Important

Ensure you are using a UTF-8 database collation (for example Latin1_General_100_BIN2_UTF8) because string values in PARQUET files are encoded using UTF-8 encoding. A mismatch between the text encoding in the PARQUET file and the collation may cause unexpected conversion errors. You can easily change the default collation of the current database using the following T-SQL statement: alter database current collate Latin1_General_100_BIN2_UTF8'.

Note: If you use the Latin1_General_100_BIN2_UTF8 collation you will get an additional performance boost compared to the other collations. The Latin1_General_100_BIN2_UTF8 collation is compatible with parquet string sorting rules. The SQL pool is able to eliminate some parts of the parquet files that will not contain data needed in the queries (file/column-segment pruning). If you use other collations, all data from the parquet files will be loaded into Synapse SQL and the filtering is happening within the SQL process. The Latin1_General_100_BIN2_UTF8 collation has additional performance optimization that works only for parquet and CosmosDB. The downside is that you lose fine-grained comparison rules like case insensitivity.

Reference: <https://docs.microsoft.com/en-us/azure/synapse-analytics/sql/query-parquet-files>

NEW QUESTION 14

- (Exam Topic 3)

You manage a dataset that contains the two data sources as shown in the following table.

Data source	Type of data	Privacy level
Azure SQL database	Sensitive company data	Private
Microsoft SharePoint folder	Non-sensitive company data	Private

When you attempt to refresh the dataset in powerbi.com, you receive the following error message: “[Unable to combine data] Add Columns is accessing data sources that have privacy levels which cannot be used together. Please rebuild this data combination.”

You discover that the dataset contains queries that fold data from the SharePoint folder to the Azure SQL database.

You need to resolve the error. The solution must provide the highest privacy possible.

Which privacy level should you select for each data source? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Azure SQL database:

▼

Organizational

Private

Public

SharePoint folder:

▼

Organizational

Private

Public

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: Private

This Formula.Firewall error is the result of Power Query's Data Privacy Firewall (aka the Firewall)

Note: Folding is a term that refers to converting expressions in M (such as filters, renames, joins, and so on) into operations against a raw data source (such as SQL, OData, and so on).

Box 2: Organizational

Organizational Limits the visibility of a data source to a trusted group of people. It is isolated from all Public data sources, but is visible to other Organizational data sources. A common example is a Microsoft Word document on an intranet SharePoint site with permissions enabled for a trusted group.

Reference:

<https://support.microsoft.com/en-us/office/set-privacy-levels-power-query-cc3ede4d-359e-4b28-bc72-9bee7900>

NEW QUESTION 18

- (Exam Topic 3)

You are attempting to configure certification for a Power BI dataset and discover that the certification setting for the dataset is unavailable.

What are two possible causes of the issue? Each correct answer presents a complete solution. NOTE: Each correct selection is worth one point.

- A. The workspace is in shared capacity.
- B. You have insufficient permissions.
- C. Dataset certification is disabled for the Power BI tenant.
- D. The sensitivity level for the dataset is set to Highly Confidential.
- E. Row-level security (RLS) is missing from the dataset.

Answer: BC

Explanation:

Reference: <https://docs.microsoft.com/en-us/power-bi/admin/service-admin-setup-certification> <https://docs.microsoft.com/en-us/power-bi/collaborate-share/service-endorse-content>

NEW QUESTION 23

- (Exam Topic 3)

You are creating an external table by using an Apache Spark pool in Azure Synapse Analytics. The table will contain more than 20 million rows partitioned by date. The table will be shared with the SQL engines.

You need to minimize how long it takes for a serverless SQL pool to execute a query data against the table. In which file format should you recommend storing the table data?

- A. JSON
- B. Apache Parquet
- C. CSV
- D. Delta

Answer: B

Explanation:

Prepare files for querying

If possible, you can prepare files for better performance:

* Convert large CSV and JSON files to Parquet. Parquet is a columnar format. Because it's compressed, its file sizes are smaller than CSV or JSON files that contain the same data. Serverless SQL pool skips the columns and rows that aren't needed in a query if you're reading Parquet files. Serverless SQL pool needs less time and fewer storage requests to read it.
 Reference: <https://docs.microsoft.com/en-us/azure/synapse-analytics/sql/best-practices-serverless-sql-pool> <https://stackoverflow.com/questions/65320949/parquet-vs-delta-format-in-azure-data-lake-gen-2-store>

NEW QUESTION 24

- (Exam Topic 3)

You are using DAX Studio to analyze a slow-running report query. You need to identify inefficient join operations in the query. What should you review?

- A. the query statistics
- B. the query plan
- C. the query history
- D. the server timings

Answer: B

Explanation:

Open DAX Studio.

Paste the query there, enable Query Plan display and Server Timings, run your query (with clear cache), and then study the query plan for large row counts. Once the culprit is identified you can decide how to rewrite your DAX to make that part faster.

Reference: <https://community.powerbi.com/t5/Power-Query/DAX-Query-taking-longer-time/td-p/1171961> <https://www.sqlbi.com/wp-content/uploads/DAX-Query-Plans.pdf>

NEW QUESTION 27

- (Exam Topic 3)

You are using a Python notebook in an Apache Spark pool in Azure Synapse Analytics. You need to present the data distribution statistics from a DataFrame in a tabular view. Which method should you invoke on the DataFrame?

- A. freqItems
- B. corr
- C. summary
- D. rollup

Answer: B

Explanation:

pandas.DataFrame.corr computes pairwise correlation of columns, excluding NA/null values. Incorrect:

* freqItems pyspark.sql.DataFrame.freqItems

Finding frequent items for columns, possibly with false positives. Using the frequent element count algorithm described in <https://doi.org/10.1145/762471.762473>, proposed by Karp, Schenker, and Papadimitriou.'

* summary is used for index.

* There is no panda method for rollup. Rollup would not be correct anyway. Reference: <https://pandas.pydata.org/docs/reference/api/pandas.DataFrame.corr.html>

NEW QUESTION 30

- (Exam Topic 3)

You plan to modify a Power BI dataset.

You open the Impact analysis panel for the dataset and select Notify contacts. Which contacts will be notified when you use the Notify contacts feature?

- A. any users that accessed a report that uses the dataset within the last 30 days
- B. the workspace admins of any workspace that uses the dataset
- C. the Power BI admins
- D. all the workspace members of any workspace that uses the dataset

Answer: D

Explanation:

Notify contacts

If you've made a change to a dataset or are thinking about making a change, you might want to contact the relevant users to tell them about it. When you notify contacts, an email is sent to the contact lists of all the impacted workspaces. Your name appears on the email so the contacts can find you and reply back in a new email thread.

Reference: <https://docs.microsoft.com/en-us/power-bi/collaborate-share/service-dataset-impact-analysis>

NEW QUESTION 33

- (Exam Topic 3)

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You are using an Azure Synapse Analytics serverless SQL pool to query a collection of Apache Parquet files by using automatic schema inference. The files contain more than 40 million rows of UTF-8-encoded business names, survey names, and participant counts. The database is configured to use the default collation.

The queries use open row set and infer the schema shown in the following table.

name	system_type_name	max_length
businessName	varchar(8000)	8000
surveyName	varchar(8000)	8000
participants	int	4

You need to recommend changes to the queries to reduce I/O reads and tempdb usage.

Solution: You recommend using openrowset with to explicitly specify the maximum length for businessName and surveyName.

Does this meet the goal?

- A. Yes
- B. No

Answer: B

Explanation:

Instead use Solution: You recommend using OPENROWSET WITH to explicitly define the collation for businessName and surveyName as Latin1_General_100_BIN2_UTF8.

Query Parquet files using serverless SQL pool in Azure Synapse Analytics. Important

Ensure you are using a UTF-8 database collation (for example Latin1_General_100_BIN2_UTF8) because string values in PARQUET files are encoded using UTF-8 encoding. A mismatch between the text encoding in the PARQUET file and the collation may cause unexpected conversion errors. You can easily change the default collation of the current database using the following T-SQL statement: alter database current collate Latin1_General_100_BIN2_UTF8'.

Note: If you use the Latin1_General_100_BIN2_UTF8 collation you will get an additional performance boost compared to the other collations. The Latin1_General_100_BIN2_UTF8 collation is compatible with parquet string sorting rules. The SQL pool is able to eliminate some parts of the parquet files that will not contain data needed in the queries (file/column-segment pruning). If you use other collations, all data from the parquet files will be loaded into Synapse SQL and the filtering is happening within the SQL process. The Latin1_General_100_BIN2_UTF8 collation has additional performance optimization that works only for parquet and CosmosDB. The downside is that you lose fine-grained comparison rules like case insensitivity.

Reference: <https://docs.microsoft.com/en-us/azure/synapse-analytics/sql/query-parquet-files>

NEW QUESTION 38

- (Exam Topic 3)

You are creating a Power BI single-page report.

Some users will navigate the report by using a keyboard, and some users will navigate the report by using a screen reader.

You need to ensure that the users can consume content on a report page in a logical order. What should you configure on the report page?

- A. the bookmark order
- B. the X position
- C. the layer order
- D. the tab order

Answer: D

Explanation:

Tab order is the order in which users interact with the items on a page using the keyboard. Generally, we want tab order to be predictable and to closely match the visual order on the page (unless there is a good reason to deviate).

Note: If you are using the keyboard to navigate in a Power BI report, the order in which you arrive at visuals will not follow your vision unless you set the new tab order property. If you have low or no vision, this becomes an even bigger issue because you may not be able to see that you are navigating visuals out of visual order because the screen reader just reads whatever comes next.

Reference: <https://datasavvy.me/2018/12/26/tab-order-enhances-power-bi-report-accessibility/>

NEW QUESTION 39

- (Exam Topic 3)

You have a Power BI Premium capacity.

You need to increase the number of virtual cores associated to the capacity. Which role do you need?

- A. Power BI workspace admin
- B. capacity admin
- C. Power Platform admin
- D. Power BI admin

Answer: D

Explanation:

Change capacity size

Power BI admins and global administrators can change Power BI Premium capacity. Capacity admins who are not a Power BI admin or global administrator don't have this option.

Reference: <https://docs.microsoft.com/en-us/power-bi/enterprise/service-admin-premium-manage>

NEW QUESTION 43

- (Exam Topic 3)

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have a Power BI dataset named Dataset1.

In Dataset1, you currently have 50 measures that use the same time intelligence logic. You need to reduce the number of measures, while maintaining the current functionality. Solution: From Power BI Desktop, you create a hierarchy.

Does this meet the goal?

- A. Yes
- B. No

Answer: B

Explanation:

Instead use the solution: From DAX Studio, you write a query that uses grouping sets. A grouping is a set of discrete values that are used to group measure fields.

Note: A hierarchy is an ordered set of values that are linked to the level above. An example of a hierarchy could be Country, State, and City. Cities are in a State,

and States make up a Country. In Power BI visuals can handle hierarchy data and provide controls for the user to navigate up and down the hierarchy.
Reference: <https://docs.microsoft.com/en-us/power-bi/developer/visuals/capabilities> <https://powerbi.tips/2018/09/how-to-navigate-hierarchies/>

NEW QUESTION 47

- (Exam Topic 3)

You have an Azure Synapse Analytics serverless SQL pool and an Azure Data Lake Storage Gen2 account. You need to query all the files in the 'csv/taxi/' folder and all its subfolders. All the files are in CSV format and have a header row.

How should you complete the query? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

SELECT*

FROM OPENROWSET (

BULK 'csv/taxi',

BULK 'csv/taxi/**',

BULK 'csv/taxi/*.csv',

BULK 'csv/taxi/',

DATA_SOURCE = 'datalake',

FORMAT = 'CSV', PARSER_VERSION = '2.0',

FIRSTROW = 0

FIRSTROW = 1

FIRSTROW = -1

FIRSTROW = 2

)

WITH (

pickup_datetime DATETIME2,

passenger_count INT,

trip_distance FLOAT,

total_amount FLOAT

) AS nyc;

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: BULK 'csv/taxi*.CSV',

*.CSV to get all the CSV files. Box 2: FIRSTROW=2

As there is a header we should read from the second line. Note: FIRSTROW = 'first_row'

Specifies the number of the first row to load. The default is 1 and indicates the first row in the specified data file. The row numbers are determined by counting the row terminators. FIRSTROW is 1-based.

Incorrect:

Not FIRSTROW=1. FIRSTROW=1 is used when there is no header.

Reference: <https://docs.microsoft.com/en-us/azure/synapse-analytics/sql/develop-openrowset>

NEW QUESTION 50

- (Exam Topic 3)

You manage a Power BI dataset that queries a fact table named SalesDetails. SalesDetails contains three date columns named OrderDate, CreatedOnDate, and ModifiedDate.

You need to implement an incremental refresh of SalesDetails. The solution must ensure that OrderDate starts on or after the beginning of the prior year.

Which four actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

NOTE: More than one order of answer choices is correct. You will receive credit for any of the correct orders you select.

Actions

Answer Area

Create RangeStart and RangeEndTime parameters.

Configure an incremental refresh to archive data that starts one year before the refresh date.

Add an applied step that filters OrderDate to the start of the prior year.

Configure an incremental refresh to archive data that starts two years before the refresh date.

Add an applied step that adds a custom date filter where OrderDate is between RangeStart and RangeEnd.



- A. Mastered
 B. Not Mastered

Answer: A

Explanation:

Graphical user interface, text, application, chat or text message Description automatically generated

Step 1: Create RangeStart and RangeEndTime parameters.

When configuring incremental refresh in Power BI Desktop, you first create two Power Query date/time parameters with the reserved, case-sensitive names RangeStart and RangeEnd. These parameters, defined in the Manage Parameters dialog in Power Query Editor are initially used to filter the data loaded into the Power BI Desktop model table to include only those rows with a date/time within that period.

Step 2: Add an applied step that adds a custom date filter OrderDate is Between RangeStart and RangeEnd. With RangeStart and RangeEnd parameters defined, you then apply custom Date filters on your table's date

column. The filters you apply select a subset of data that will be loaded into the model when you click Apply.

Step 3: Configure an incremental refresh to archive data that starts two years before the refresh date.

After filters have been applied and a subset of data has been loaded into the model, you then define an incremental refresh policy for the table. After the model is published to the service, the policy is used by the service to create and manage table partitions and perform refresh operations. To define the policy, you will use the Incremental refresh and real-time data dialog box to specify both required settings and optional settings.

Step 4: Add an applied step that filters OrderDate to the start of the prior year.

Reference: <https://docs.microsoft.com/en-us/power-bi/connect-data/incremental-refresh-overview>

NEW QUESTION 52

- (Exam Topic 3)

You are configuring Azure Synapse Analytics pools to support the Azure Active Directory groups shown in the following table.

Name	Requirement
Group1	Analyze data to create and train machine learning models in Synapse Analytics.
Group2	Execute complex queries with multiple joins against relational data. Results will be exported by using PolyBase.
Group3	Query and load data from Apache Parquet files stored in Azure Data Lake Storage Gen2. Costs must be based on the amount of data processed.

Which type of pool should each group use? To answer, drag the appropriate pool types to the groups. Each pool type may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Pool Types

Apache Spark pool

Dedicated SQL pool

Serverless SQL pool

Answer Area

Group1:

Pool Type

Group2:

Pool Type

Group3:

Pool Type

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: Apache Spark pool

An Apache Spark pool provides open-source big data compute capabilities. After you've created an Apache Spark pool in your Synapse workspace, data can be loaded, modeled, processed, and distributed for faster analytic insight.

Box 2: Dedicated SQL Pool

Dedicated SQL Pool - Data is stored in relational tables

Box 3: Serverless SQL pool

Serverless SQL pool - Cost is incurred for the data processed per query

Reference:

<https://docs.microsoft.com/en-us/azure/synapse-analytics/quickstart-create-apache-spark-pool-portal>

<https://www.royalcyber.com/blog/data-services/dedicated-sql-pool-vs-serverless-sql/>

NEW QUESTION 53

- (Exam Topic 3)

Your company is migrating its current, custom-built reporting solution to Power BI. The Power BI tenant must support the following scenarios:

- > 40 reports that will be embedded in external websites. The websites control their own security. The reports will be consumed by 50 users monthly.
- > Forty-five users that require access to the workspaces and apps in the Power BI Admin portal. Ten of the users must publish and consume datasets that are larger than 1 GB.
- > Ten developers that require Text Analytics transformations and paginated reports for datasets. An additional 15 users will consume the reports.

You need to recommend a licensing solution for the company. The solution must minimize costs.

Which two Power BI license options should you include in the recommendation? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. 70 Premium per user
- B. one Premium
- C. 70 Pro
- D. one Embedded
- E. 35 Pro
- F. 35 Premium per user

Answer: BF

Explanation:

B:

Free - 40 reports that will be embedded in external websites. The websites control their own security. Free - The reports will be consumed by 50 users monthly.

Free + 1 Premium for the Worspace -Forty-five users that require access to the workspaces and apps in the Power BI Admin portal.

F: Ten of the users must publish and consume datasets that are larger than 1 GB.

Ten developers that require Text Analytics transformations and paginated reports for datasets. An additional 15 users will consume the reports.

Power BI Premium per user features and capabilities

* Pixel perfect paginated reports are available for operational reporting capabilities based on SSRS technology. Users can create highly formatted reports in various formats such as PDF and PPT, which are embeddable in applications and are designed to be printed or shared.

Note: There are three kinds of Power BI per-user licenses: Free, Pro, and Premium Per User. Power BI (free): Access to content in My Workspace

Power BI (free) + Workspace is Premium: Consume content shared with them

Power BI Pro: Publish content to other workspaces, share dashboards, subscribe to dashboards and reports, share with users who have a Pro license

Power BI Pro + Workspace is Premium: Distribute content to users who have free licenses

Power BI Premium Per User: Publish content to other workspaces, share dashboards, subscribe to dashboards and reports, share with users who have a Premium Per User license

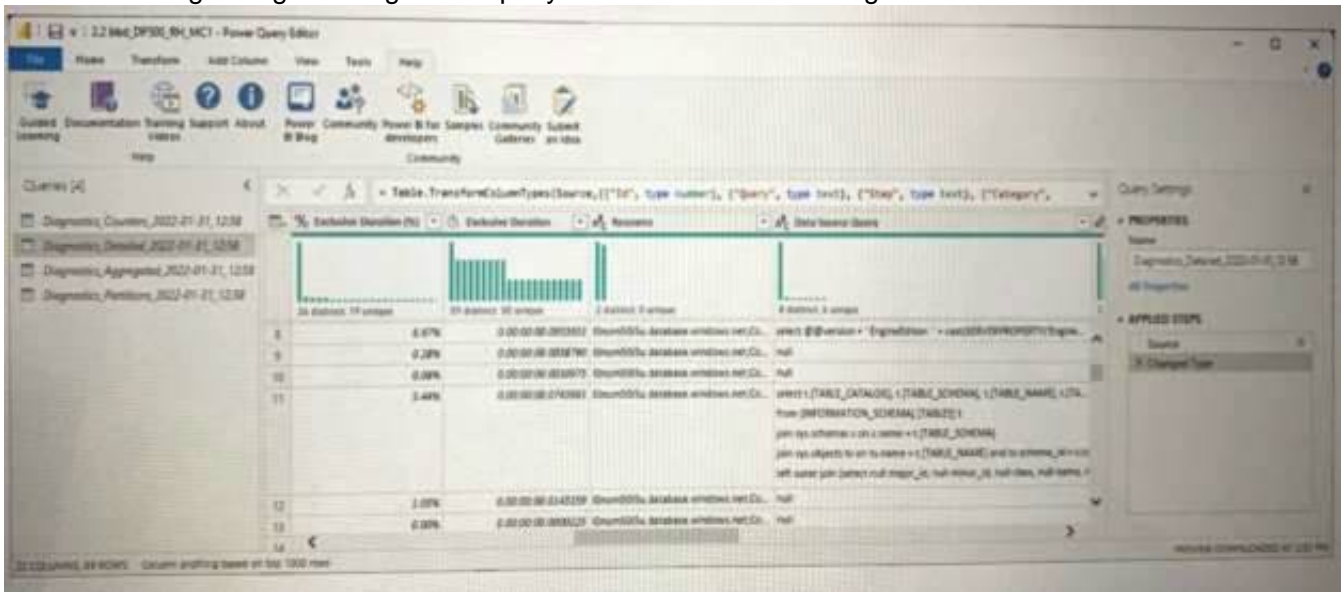
Power BI Premium Per User + Workspace is Premium: Distribute content to users who have free and Pro licenses

Reference: <https://docs.microsoft.com/en-us/power-bi/fundamentals/service-features-license-type>

NEW QUESTION 58

- (Exam Topic 3)

You are running a diagnostic against a query as shown in the following exhibit.



What can you identify from the diagnostics query?

- A. All the query steps are folding.
- B. Elevated permissions are being used to query records.
- C. The query is timing out.
- D. Some query steps are folding.

Answer: A

Explanation:

Understanding folding with Query Diagnostics

One of the most common reasons to use Query Diagnostics is to have a better understanding of what operations were 'pushed down' by Power Query to be performed by the back-end data source, which is also known as 'folding'. If we want to see what folded, we can look at what is the 'most specific' query, or queries, that get sent to the back-end data source. We can look at this for both ODATA and SQL.

Reference: <https://docs.microsoft.com/en-us/power-query/querydiagnosticsfolding>

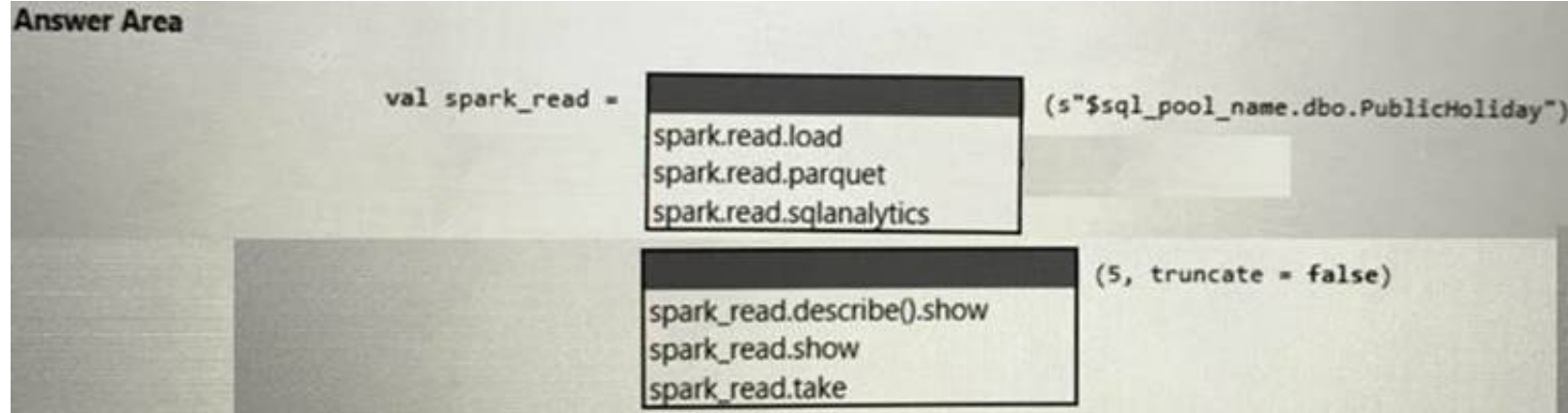
NEW QUESTION 61

- (Exam Topic 3)

You have an Azure Synapse workspace named Workspace1.

You need to use PySpark in a notebook to read data from a SQL pool as an Apache Spark DataFrame and display the top five

How should you complete the code? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Graphical user interface, text, application Description automatically generated

Box 1: sqlanalytics

Read from a SQL Pool table with Spark

// Read the table we just created in the sql pool as a Spark dataframe val spark_read = spark.read. sqlanalytics(s"\$sql_pool_name.dbo.PublicHoliday")

spark_read.show(5, truncate = false)

Box 2: spark_read.show Sample output:

Graphical user interface, text, application, email Description automatically generated

```
spark_read: org.apache.spark.sql.DataFrame = [countryOrRegion: string, holidayName: string ... 3 more fields]
```

countryOrRegion	holidayName	normalizeHolidayName	isPaidTimeOff	countryRegionCode
Czech	Den české státnosti	Den české státnosti	null	CZ
Norway	Søndag	Søndag	null	NO
Sweden	Søndag	Søndag	null	SE
India	Gandhi Jayanti	Gandhi Jayanti	true	IN
Germany	Tag der Deutschen Einheit	Tag der Deutschen Einheit	null	DE

only showing top 5 rows

Reference:

<https://github.com/Azure-Samples/Synapse/blob/main/Notebooks/Scala/03%20Read%20and%20write%20from>

NEW QUESTION 64

- (Exam Topic 3)

You use Azure Synapse Analytics and Apache Spark notebooks to You need to use PySpark to gain access to the visual libraries. Which Python libraries should you use?

- A. Seaborn only
- B. Matplotlib and Seaborn
- C. Matplotlib only
- D. Matplotlib and TensorFlow
- E. TensorFlow only
- F. Seaborn and TensorFlow

Answer: B

Explanation:

Matplotlib

You can render standard plotting libraries, like Matplotlib, using the built-in rendering functions for each library.

Matplotlib is a plotting library for the Python programming language and its numerical mathematics extension NumPy.

Additional libraries

Beyond these libraries, the Azure Synapse Analytics Runtime also includes the following set of libraries that are often used for data visualization:

Seaborn

Seaborn is a Python data visualization library based on matplotlib. It provides a high-level interface for drawing attractive and informative statistical graphics.

Reference: <https://docs.microsoft.com/en-us/azure/synapse-analytics/spark/apache-spark-data-visualization> <https://seaborn.pydata.org/>

NEW QUESTION 67

- (Exam Topic 3)

You have a 2-GB Power BI dataset.

You need to ensure that you can redeploy the dataset by using Tabular Editor. The solution must minimize how long it will take to apply changes to the dataset from powerbi.com.

Which two actions should you perform in powerbi.com? Each correct answer presents part of the solution. NOTE: Each correct selection is worth one point

- A. Enable service principal authentication for read-only admin APIs.
- B. Turn on Large dataset storage format.
- C. Connect the target workspace to an Azure Data Lake Storage Gen2 account.
- D. Enable XMLA read-write.

Answer: BD

Explanation:

Optimize datasets for write operations by enabling large models

When using the XMLA endpoint for dataset management with write operations, it's recommended you enable the dataset for large models. This reduces the overhead of write operations, which can make them considerably faster. For datasets over 1 GB in size (after compression), the difference can be significant.

Tabular Editor supports Azure Analysis Services and Power BI Premium Datasets through XMLA read/write. Note: Tabular Editor - An open-source tool for creating, maintaining, and managing tabular models using an

intuitive, lightweight editor. A hierarchical view shows all objects in your tabular model. Objects are

organized by display folders with support for multi-select property editing and DAX syntax highlighting. XMLA read-only is required for query operations. Read-write is required for metadata operations.

Reference: <https://docs.microsoft.com/en-us/power-bi/enterprise/service-premium-connect-tools> <https://tabulareditor.github.io/>

NEW QUESTION 72

- (Exam Topic 3)

You are using GitHub as a source control solution for an Azure Synapse Studio workspace. You need to modify the source control solution to use an Azure DevOps Git repository. What should you do first?

- A. Disconnect from the GitHub repository.
- B. Create a new pull request.
- C. Change the workspace to live mode.
- D. Change the active branch.

Answer: A

Explanation:

By default, Synapse Studio authors directly against the Synapse service. If you have a need for collaboration using Git for source control, Synapse Studio allows you to associate your workspace with a Git repository, Azure DevOps, or GitHub.

Prerequisites

Users must have the Azure Contributor (Azure RBAC) or higher role on the Synapse workspace to configure, edit settings and disconnect a Git repository with Synapse.

Reference: <https://docs.microsoft.com/en-us/azure/synapse-analytics/cicd/source-control>

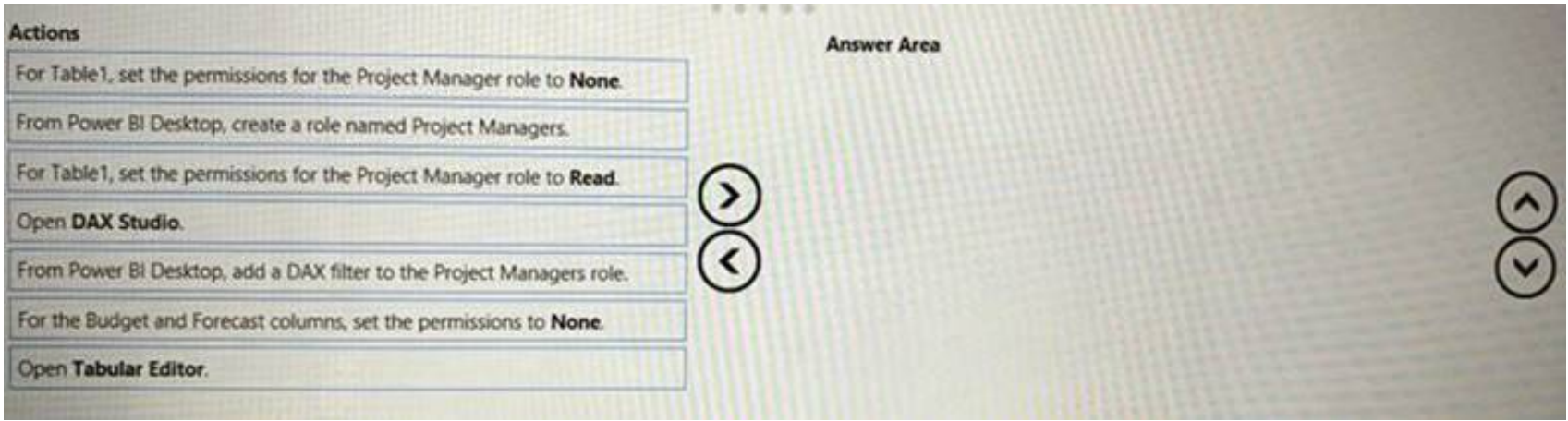
NEW QUESTION 73

- (Exam Topic 3)

You have a Power BI dataset that contains two tables named Table1 and Table2. The dataset is used by one report.

You need to prevent project managers from accessing the data in two columns in Table1 named Budget and Forecast.

Which four actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Step 1: From Power BI Desktop, create a role named Project Managers. Create roles

You can define roles within Power BI Desktop. Step 2: Open Tabular Editor

Under Tables, select the table to which you want to apply a DAX rule.

In the Table filter DAX expression box, enter the DAX expressions. This expression returns a value of true or false. For example: [Entity ID] = "Value".

Step 3: From Power BI Desktop, add a DAX filter to the Project Managers role. Step 4: For Table1, the Budget and Forecast columns, set the permissions to None.

Reference: <https://docs.microsoft.com/en-us/power-bi/guidance/rls-guidance>

NEW QUESTION 75

- (Exam Topic 3)

You have a Power BI dataset that has only the necessary fields visible for report development.

You need to ensure that end users see only 25 specific fields that they can use to personalize visuals. What should you do?

- A. From Tabular Editor, create a new role.
- B. Hide all the fields in the dataset.
- C. Configure object-level security (OLS).
- D. From Tabular Editor, create a new perspective.

Answer: B

NEW QUESTION 79

- (Exam Topic 3)

You have a Power BI dataset that contains the following measures:

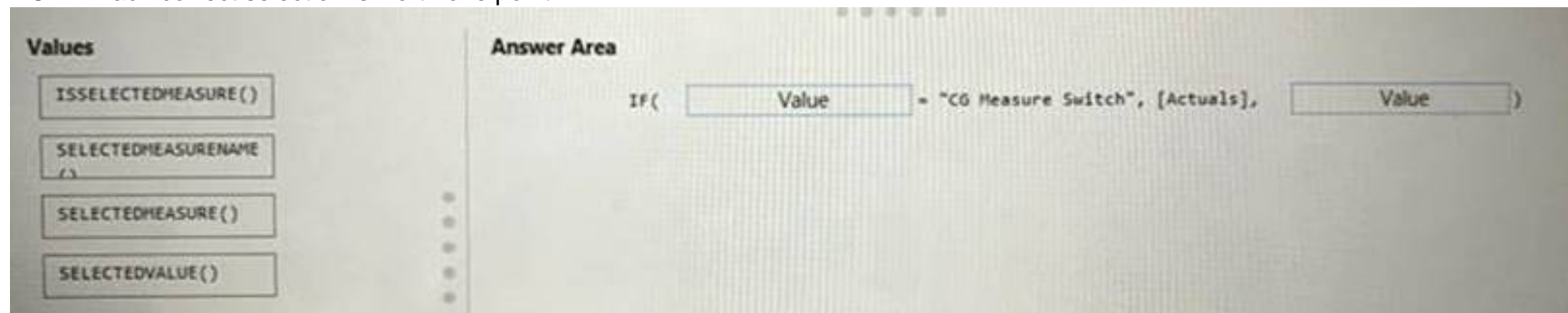
- Budget
- Actuals
- Forecast

You create a report that contains 10 visuals.

You need provide users with the ability to use a slicer to switch between the measures in two visuals only. You create a dedicated measure named cg Measure switch.

How should you complete the DAX expression for the Actuals measure? To answer, drag the appropriate values to the targets. Each value may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: SELECTEDMEASURENAME()

SELECTEDMEASURENAME is used by expressions for calculation items to determine the measure that is in context by name.

Syntax: SELECTEDMEASURENAME()

No parameters. Example:

The following calculation item expression checks if the current measure is Expense Ratio and conditionally applies calculation logic. Since the check is based on a string comparison, it is not subject to formula fixup and will not benefit from object renaming being automatically reflected. For a similar comparison that would benefit from formula fixup, please see the ISSELECTEDMEASURE function instead.

```
IF (
    SELECTEDMEASURENAME = "Expense Ratio", SELECTEDMEASURE (),
    DIVIDE ( SELECTEDMEASURE (), COUNTROWS ( DimDate ) )
)
```

Box 2: SELECTEDVALUE()

SELECTEDVALUE returns the value when the context for columnName has been filtered down to one distinct value only. Otherwise returns alternateResult.

Syntax:

SELECTEDVALUE(<columnName>[, <alternateResult>]) M1, M2, ... - A list of measures.

Reference: <https://docs.microsoft.com/en-us/dax/selectedmeasurename-function-dax> <https://docs.microsoft.com/en-us/dax/selectedvalue-function>

NEW QUESTION 80

- (Exam Topic 3)

You have a Power BI dataset that contains the following measure.


```

YTD Year-over-Year Var =
DIVIDE (
    (
        [Sales Amount]
        - CALCULATE (
            [Sales],
            SAMEPERIODLASTYEAR ( 'Calendar'[Date] ),
            'Calendar'[Flag] = "YTD"
        )
    ),
    CALCULATE (
        [Sales],
        SAMEPERIODLASTYEAR ( 'Calendar'[Date] ),
        'Calendar'[Flag] = "YTD"
    ),
    BLANK()
)

```

You need to improve the performance of the measure without affecting the logic or the results. What should you do?

- A. Replace both calculate functions by using a variable that contains the calculate function.
- B. Remove the alternative result of blank() from the divide function.
- C. Create a variable and replace the values for [sales Amount].
- D. Remove "calendar'[Flag] = "YTD" from the code.

Answer: A

NEW QUESTION 85

- (Exam Topic 3)

You are building a Power BI dataset that will use two data sources.

The dataset has a query that uses a web data source. The web data source uses anonymous authentication. You need to ensure that the query can be used by all the other queries in the dataset.

Which privacy level should you select for the data source?

- A. Public
- B. Organizational
- C. Private
- D. None

Answer: A

Explanation:

A Public data source gives everyone visibility to the data contained in the data source. Only files, internet data sources, or workbook data can be marked Public. Data from a Public data source may be freely folded to other sources.

Reference: <https://docs.microsoft.com/en-us/power-bi/enterprise/desktop-privacy-levels>

NEW QUESTION 90

- (Exam Topic 3)

You have a sales report as shown in the following exhibit.



The sales report has the following characteristics: The measures are optimized.
The dataset uses import storage mode.
Data points, hierarchies, and fields cannot be removed or filtered from the report page. From powerbi.com, users experience slow load times when viewing the report.
You need to reduce how long it takes for the report to load without affecting the data displayed in the report. Which two actions should you perform? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

- A. Change the report theme to monochromatic.
- B. Replace the single-value cards with a multi-row card.
- C. Replace the product category charts with a bar chart for sales and a hierarchy of Category and Sub Category on the axis.
- D. Replace all the filters on the Filters pane with visual slicers on the report page.

Answer: BC

NEW QUESTION 95

- (Exam Topic 3)
You have new security and governance protocols for Power BI reports and datasets. The new protocols must meet the following requirements.

- New reports can be embedded only in locations that require authentication.
- Live connections are permitted only for workspaces that use Premium capacity datasets.

Which three actions should you recommend performing in the Power BI Admin portal? Each correct answer presents part of the solution. NOTE: Each correct selection is worth one point.

- A. From Tenant settings, disable Allow XMLA endpoints and Analyze in Excel with on-premises datasets.
- B. From the Premium per user settings, set XMLA Endpoint to Off.
- C. From Embed Codes, delete all the codes.
- D. From Capacity settings, set XMLA Endpoint to Read Write.
- E. From Tenant settings, set Publish to web to Disable.

Answer: ADE

Explanation:
Reference: <https://docs.microsoft.com/en-us/power-bi/enterprise/service-premium-connect-tools> <https://powerbi.microsoft.com/en-us/blog/power-bi-february-service-update>

NEW QUESTION 99

- (Exam Topic 3)
You are optimizing a Power BI data model by using DAX Studio.
You need to capture the query events generated by a Power BI Desktop report. What should you use?

- A. the DMV list
- B. a Query Plan trace
- C. an All Queries trace
- D. a Server Timings trace

Answer: C

Explanation:
The All Queries trace in Dax Studio supports capturing the query events from all client tools (not just queries sent from DAX Studio like the Query Plan and Server

Timings features do). The 'All Queries' trace is really useful when you wish to see the queries that are generated by a client tool like Power BI Desktop.
 Reference: <https://daxstudio.org/documentation/features/all-queries-trace/>

NEW QUESTION 101

- (Exam Topic 3)

You have the following code in an Azure Synapse notebook.

```
import matplotlib.pyplot as plt
x1 = [2, 3, 4]
y1 = [5, 5, 5]
x2 = [1, 2, 3, 4, 5]
y2 = [2, 3, 2, 3, 4]
y3 = [6, 8, 7, 8, 7]
plt.scatter(x1, y1)
plt.scatter(x2, y2, marker='v', color='r')
plt.scatter(x2, y3, marker='^', color='m')
plt.title('Scatter Plot')
plt.show()
```

Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the code.
 NOTE: Each correct selection is worth one point.

Answer Area

There will be [answer choice] rendered as the output of the code.

one scatterplot

two scatterplots

three scatterplots

There will be [answer choice] used in the output.

one marker symbol

two marker symbols

three marker symbols

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: three scatterplots Compare Plots

Example, Draw two plots on the same figure: import matplotlib.pyplot as plt

import numpy as np

#day one, the age and speed of 13 cars:

x = np.array([5,7,8,7,2,17,2,9,4,11,12,9,6])

y = np.array([99,86,87,88,111,86,103,87,94,78,77,85,86])

plt.scatter(x, y)

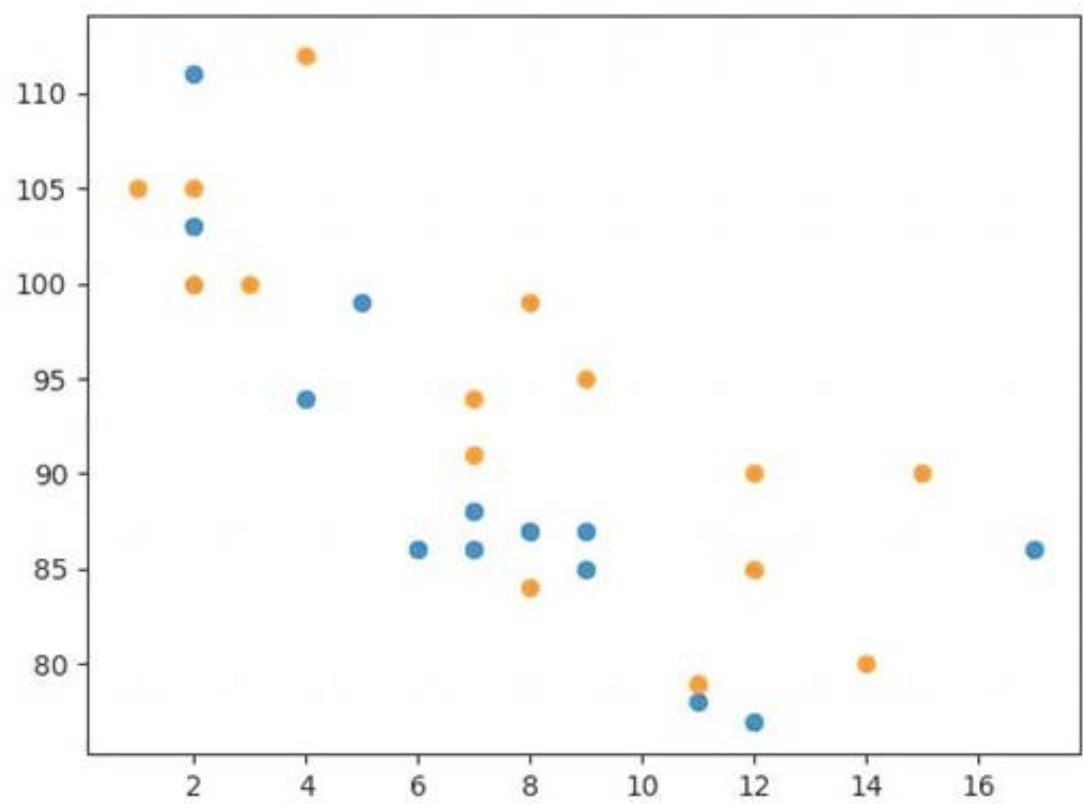
#day two, the age and speed of 15 cars:

x = np.array([2,2,8,1,15,8,12,9,7,3,11,4,7,14,12])

y = np.array([100,105,84,105,90,99,90,95,94,100,79,112,91,80,85])

plt.scatter(x, y) plt.show() Result:

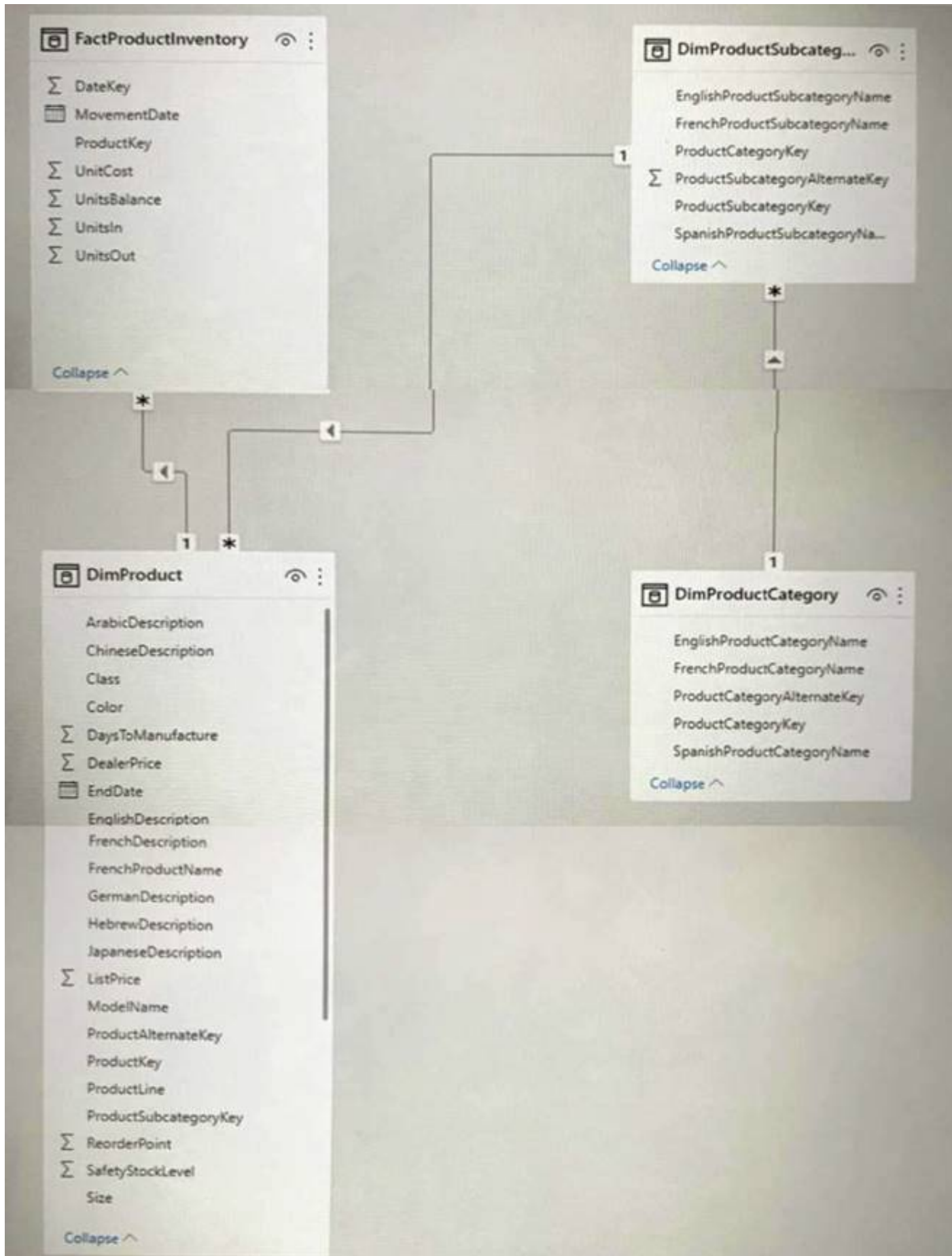
Chart, scatter chart Description automatically generated



Box 2: three marker symbols
One for each scatterplot. One default, and two defined.
Default is point.
v is triangle down.
^ is triangle up.
Reference: https://www.w3schools.com/python/matplotlib_scatter.asp https://matplotlib.org/stable/api/markers_api.html

NEW QUESTION 102

- (Exam Topic 3)
Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You have the Power BI data model shown in the exhibit. (Click the Exhibit tab.)



Users indicate that when they build reports from the data model, the reports take a long time to load. You need to recommend a solution to reduce the load times of the reports.

Solution: You recommend creating a perspective that contains the commonly used fields. Does this meet the goal?

- A. Yes
- B. No

Answer: B

Explanation:

Instead denormalize For Performance.

Even though it might mean storing a bit of redundant data, schema denormalization can sometimes provide better query performance. The only question then becomes is the extra space used worth the performance benefit.

Reference: <https://www.mssqltips.com/sqlservertutorial/3211/denormalize-for-performance/>

NEW QUESTION 107

- (Exam Topic 3)

You use Advanced Editor in Power Query Editor to edit a query that references two tables named Sales and Commission. A sample of the data in the Sales table is shown in the following table.

OrderID	SalesPerson	Amount
101	Tom	199.99
103	Eileen	279.99
108	Enrique	333.42

A sample of the data in the Commission table is shown in the following table.

Person	Commission
Tom	0.04
Eileen	0.05

You need to merge the tables by using Power Query Editor without losing any rows in the Sales table. How should you complete the query? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

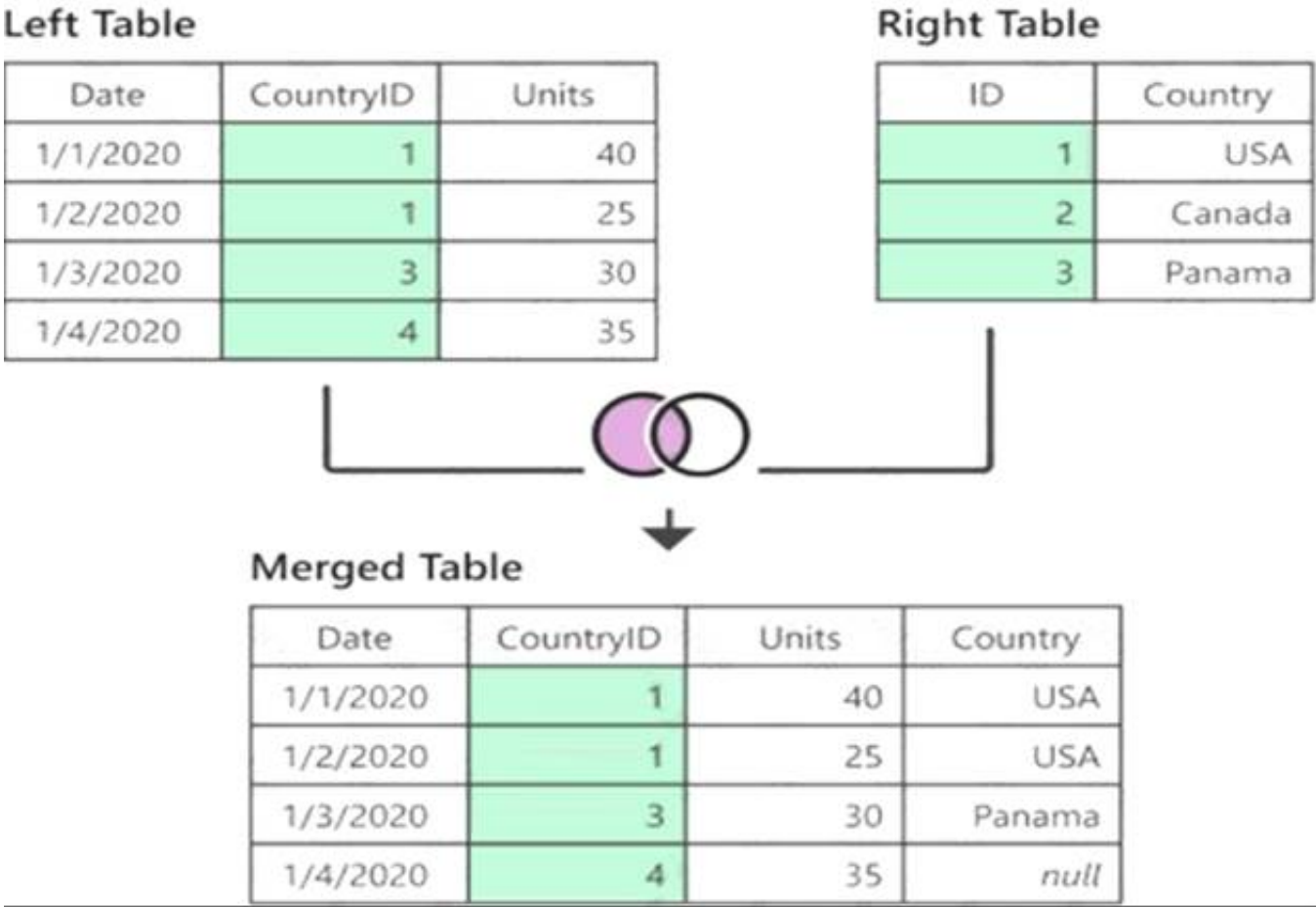


- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: Join
Box 2: LeftOuter Left outer join
One of the join kinds available in the Merge dialog box in Power Query is a left outer join, which keeps all the rows from the left table and brings in any matching rows from the right table.
Diagram, table Description automatically generated



Reference: <https://docs.microsoft.com/en-us/power-query/merge-queries-left-outer>

NEW QUESTION 109

- (Exam Topic 3)
You have a Power BI dataset named Dataset1 that uses DirectQuery against an Azure SQL database named DB1. DB1 is a transactional database in the third normal form.
You need to recommend a solution to minimize how long it takes to execute the query. The solution must maintain the current functionality. What should you include in the recommendation?

- A. Create calculated columns in Dataset1.
- B. Remove the relationships from Dataset1.
- C. Normalize the tables in DB1.
- D. Denormalize the tables in DB1.

Answer: D

Explanation:

Denormalize to improve query performance.
Note: Normalization prevents data duplications, preserves disk space, and improves the performance of the disk I/O operations. The downside of the normalization is that the queries based on these normalized tables require more table joins.
Schema denormalization (i.e. consolidation of some dimension tables) for such databases can significantly reduce costs of the analytical queries and improve the performance.
Reference:
<https://www.mssqltips.com/sqlservertip/7114/denormalization-dimensions-synapse-mapping-data-flow/>

NEW QUESTION 110

- (Exam Topic 2)

You need to build a Transact-SQL query to implement the planned changes for the internal users.

How should you complete the Transact-SQL query? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

```
DECLARE @model varbinary(max) = (  
    SELECT native_model_object  
    FROM ml_models  
    WHERE model_name = 'rxLinMod'  
    AND model_version = 'v1');  
SELECT d.*, p.*  
FROM [ ] (MODEL = @model, DATA = dbo.rx_linMod as lm)  
    [EVALUATE  
PIVOT  
PREDICT  
SCORE]  
go [ ] (model_outcome float, trade_volume float, price_Pred float) as p;  
    [AS  
CONTAINS  
FROM  
GROUP BY  
WITH]
```

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: PREDICT

Provide internal users with the ability to incorporate machine learning models loaded to the dedicated SQL pool.

The example below shows a sample query using prediction function. An additional column with name Score and data type float is created containing the prediction results. All the input data columns as well as output prediction columns are available to display with the select statement.

-- Query for ML predictions SELECT d.*, p.Score

FROM PREDICT(MODEL = (SELECT Model FROM Models WHERE Id = 1),

DATA = dbo.mytable AS d, RUNTIME = ONNX) WITH (Score float) AS p; Box 2: WITH

Reference:

<https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-predict>

NEW QUESTION 112

- (Exam Topic 2)

You need to recommend a solution for the customer workspaces to support the planned changes.

Which two configurations should you include in the recommendation? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. Set Use datasets across workspaces to Enabled
- B. Publish the financial data to the web.
- C. Grant the Build permission for the financial data to each customer.
- D. Configure the FinData workspace to use a Power BI Premium capacity.

Answer: AD

Explanation:

Build a new dataset in the FinData workspace by using data from the Synapse Analytics dedicated SQL pool. Provide all the customers with their own Power BI workspace to create their own reports. Each workspace will use the new dataset in the FinData workspace

Reference: <https://docs.microsoft.com/en-us/power-bi/connect-data/service-datasets-admin-across-workspaces>

NEW QUESTION 117

- (Exam Topic 2)

You need to create Power BI reports that will display data based on the customers' subscription level.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions

Create a perspective.

Enable bidirectional filtering.

Create a DAX expression.

Create row-level security (RLS) roles.

Add members to row-level security (RLS) roles.

>

<

Answer Area

>

<

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Step 1: Create row-level security (RLS) roles Create roles
Note: Provide all the customers with their own Power BI workspace to create their own reports. Each workspace will use the new dataset in the FinData workspace.
Implement subscription levels for the customers. Each subscription level will provide access to specific rows of financial data.
Deploy prebuilt datasets to Power BI to simplify the query experience of the customers. Step 2: Create a DAX expression
Consider a model with two roles: The first role, named Workers, restricts access to all Payroll table rows by using the following rule expression:
FALSE()
Note: A rule will return no table rows when its expression evaluates to false.
Yet, a second role, named Managers, allows access to all Payroll table rows by using the following rule expression:
TRUE()
Take care: Should a report user map to both roles, they'll see all Payroll table rows. Step 3: Add members to row-level security (RLS) roles
Configure role mappings
Once [the model is] published to Power BI, you must map members to dataset roles. Reference: <https://docs.microsoft.com/en-us/power-bi/guidance/rls-guidance>

NEW QUESTION 118

- (Exam Topic 2)
You need to recommend a solution to resolve the query issue of the serverless SQL pool. The solution must minimize impact on the users.
What should you in the recommendation?

- A. Update the statistics for the serverless SQL pool.
- B. Move the data from the serverless SQL pool to a dedicated Apache Spark pool.
- C. Execute the sp_sec_process_daca_limic stored procedure for the serverless SQL pool.
- D. Move the data from the serverless SQL pool to a dedicated SQL pool.

Answer: D

Explanation:

Users indicate that queries against the serverless SQL pool fail occasionally because the size of tempdb has been exceeded.
In the dedicated SQL pool resource, temporary tables offer a performance benefit because their results are written to local rather than remote storage.
Temporary tables in serverless SQL pool.
Temporary tables in serverless SQL pool are supported but their usage is limited. They can't be used in queries which target files.
For example, you can't join a temporary table with data from files in storage. The number of temporary tables is limited to 100, and their total size is limited to 100 MB.
Reference: <https://docs.microsoft.com/en-us/azure/synapse-analytics/sql/develop-tables-temporary>

NEW QUESTION 120

- (Exam Topic 2)
You need to integrate the external data source to support the planned changes.
Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions

Create an Apache Spark data source.

Merge columns.

Create a web data source.

Expand the attributes.

Publish the model.

>

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Answer Area

>

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- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

NEW QUESTION 125

- (Exam Topic 1)

You need to implement object-level security (OLS) in the Power BI dataset for the sales associates.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

NEW QUESTION 129

- (Exam Topic 1)

You need to configure the Sales Analytics workspace to meet the ad hoc reporting requirements. What should you do?

- A. Grant the sales managers the Build permission for the existing Power BI datasets.
- B. Grant the sales managers admin access to the existing Power BI workspace.
- C. Create a deployment pipeline and grant the sales managers access to the pipeline.
- D. Create a PBIT file and distribute the file to the sales managers.

Answer: D

Explanation:

Allow sales managers to perform ad hoc sales reporting with minimal effort

Power BI report templates contain the following information from the report from which they were generated: Report pages, visuals, and other visual elements

The data model definition, including the schema, relationships, measures, and other model definition items All query definitions, such as queries, Query

Parameters, and other query elements

What is not included in templates is the report's data.

Report templates use the file extension .PBIT (compare to Power BI Desktop reports, which use the .PBIX extension).

Note: With Power BI Desktop, you can create compelling reports that share insights across your entire organization. With Power BI Desktop templates, you can streamline your work by creating a report template, based on an existing template, which you or other users in your organization can use as a starting point for a new report's layout, data model, and queries. Templates in Power BI Desktop help you jump-start and standardize report creation.

Reference: <https://docs.microsoft.com/en-us/power-bi/create-reports/desktop-templates>

NEW QUESTION 133

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