

Exam Questions DP-500

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

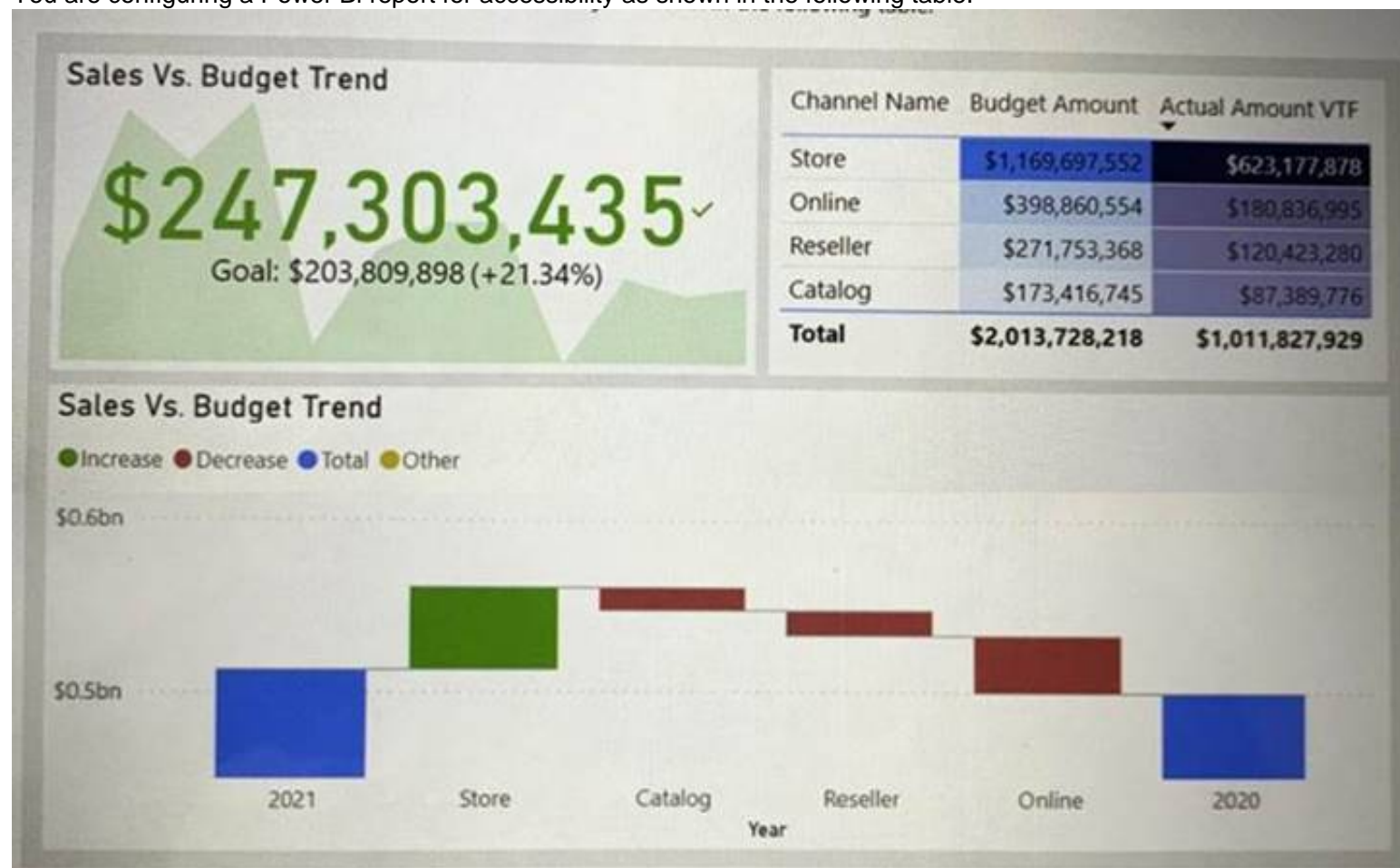
<https://www.2passeasy.com/dumps/DP-500/>



NEW QUESTION 1

- (Exam Topic 3)

You are configuring a Power BI report for accessibility as shown in the following table.



You need to change the default colors of all three visuals to make the report more accessible to users who have color vision deficiency. Which two settings should you configure in the Customize theme window? Each correct answer presents part of the solution. NOTE: Each correct selection is worth one point.

- A. Theme colors
- B. Sentiment colors
- C. Divergent colors
- D. First-level elements colors

Answer: AB

Explanation:

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

NEW QUESTION 2

- (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						
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						
Relationships						
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 3

- (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
5	Fama	\$6,097
13	Contoso	\$5,214
11	Pomum	\$4,968
7	VanArsdel	\$4,964
10	Pirum	\$4,644
2	Aliqui	\$4,479
1	Abbas	\$4,070
8	Natura	\$3,376
14	Victoria	\$2,317
4	Salvus	\$2,296
12	Quibus	\$2,208
3	Barba	\$1,601
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 4

- (Exam Topic 3)

You have a Power BI report that contains one visual.

You need to provide users with the ability to change the visual type without affecting the view for other users. What should you do?

- A. From Report setting, select Personalize visuals.
- B. From Tabular Editor, create a new perspective.
- C. From the Bookmarks pane, select Focus mode, and then select Add.
- D. From Visual options in Report settings, select Use the modern visual header with updated styling options.

Answer: A

Explanation:

Enable personalization in a report

You can enable the feature either in Power BI Desktop or the Power BI service. You can also enable it in embedded reports.

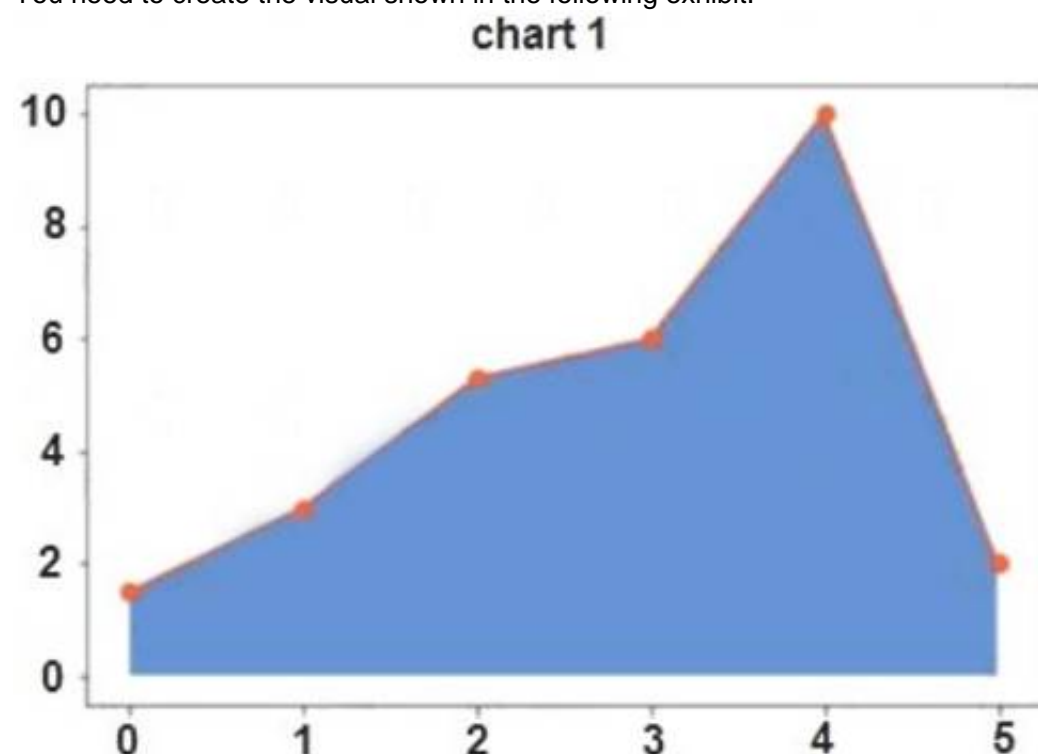
To enable the feature in Power BI Desktop, go to File > Options and settings > Options > Current file > Report settings. Make sure Personalize visuals is turned on.

NEW QUESTION 5

- (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()
```

Options for the first dropdown: angle_spectrum, axes, fill, fill_between

Options for the second dropdown: figtext, imshow, legend, subtitle

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: fill_between

matplotlib.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 6

- (Exam Topic 3)

You have a Power BI workspace that contains one dataset and four reports that connect to the dataset. The dataset uses Import storage mode and contains the following data sources:

- A CSV file in an Azure Storage account
- An Azure Database for PostgreSQL database

You plan to use deployment pipelines to promote the content from development to test to production. There will be different data source locations for each stage.

What should you include in the deployment pipeline to ensure that the appropriate data source locations are used during each stage?

- A. parameter rules
- B. selective deployment
- C. auto-binding across pipelines
- D. data source rules

Answer: A

Explanation:

Note: Create deployment rules

When working in a deployment pipeline, different stages may have different configurations. For example, each stage can have different databases or different query parameters. The development stage might query sample data from the database, while the test and production stages query the entire database.

When you deploy content between pipeline stages, configuring deployment rules enables you to allow changes to content, while keeping some settings intact. For example, if you want a dataset in a production stage to point to a production database, you can define a rule for this. The rule is defined in the production stage, under the appropriate dataset. Once the rule is defined, content deployed from test to production, will inherit the value as defined in the deployment rule, and will always apply as long as the rule is unchanged and valid.

NEW QUESTION 7

- (Exam Topic 3)

You have five Power BI reports that contain R script data sources and R visuals.

You need to publish the reports to the Power BI service and configure a daily refresh of datasets. What should you include in the solution?

- A. a Power BI Embedded capacity
- B. an on-premises data gateway (standard mode)
- C. a workspace that connects to an Azure Data Lake Storage Gen2 account
- D. an on-premises data gateway (personal mode)

Answer: D

Explanation:

To schedule refresh of your R visuals or dataset, enable scheduled refresh and install an on-premises data gateway (personal mode) on the computer containing the workbook and R.

Reference: <https://docs.microsoft.com/en-us/power-bi/connect-data/desktop-r-in-query-editor>

NEW QUESTION 8

- (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 9

- (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 10

- (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.

- 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 10

- (Exam Topic 3)

You have a Power BI tenant that contains 10 workspaces.

You need to create dataflows in three of the workspaces. The solution must ensure that data engineers can access the resulting data by using Azure Data Factory.

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

- A. Associate the Power BI tenant to an Azure Data Lake Storage account.
- B. Add the managed identity for Data Factory as a member of the workspaces.
- C. Create and save the dataflows to an Azure Data Lake Storage account.
- D. Create and save the dataflows to the internal storage of Power BI

Answer: AC

Explanation:

Data used with Power BI is stored in internal storage provided by Power BI by default. With the integration of dataflows and Azure Data Lake Storage Gen 2 (ADLS Gen2), you can store your dataflows in your organization's Azure Data Lake Storage Gen2 account. This essentially allows you to "bring your own storage" to Power BI dataflows, and establish a connection at the tenant or workspace level.

Reference:

<https://docs.microsoft.com/en-us/power-bi/transform-model/dataflows/dataflows-azure-data-lake-storage-integra>

NEW QUESTION 15

- (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 defining a data source and view for the Parquet files. You recommend updating the query to use the view.

Does this meet the goal?

- A. Yes
- B. No

Answer: B

Explanation:

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

The size of the varchar(8000) columns are too big. Better reduce their size.

A SELECT...FROM OPENROWSET(BULK...) statement queries the data in a file directly, without importing the data into a table. SELECT...FROM OPENROWSET(BULK...) statements can also list bulk-column aliases by using a format file to specify column names, and also data types.

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

NEW QUESTION 16

- (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 21

- (Exam Topic 3)

You use an Apache Spark notebook in Azure Synapse Analytics to filter and transform data. You need to review statistics for a DataFrame that includes:

The column name The column type

The number of distinct values

Whether the column has missing values Which function should you use?

- A. displayHTML()
- B. display(df, summary=true)
- C. %%configure
- D. display(df)
- E. %%lsmagic

Answer: B

Explanation:

display(df) statistic details

You can use display(df, summary = true) to check the statistics summary of a given Apache Spark DataFrame that include the column name, column type, unique values, and missing values for each column. You can also select on specific column to see its minimum value, maximum value, mean value and standard deviation.

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

NEW QUESTION 25

- (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 30

- (Exam Topic 3)

You have a group of data scientists who must create machine learning models and run periodic experiments on a large dataset.

You need to recommend an Azure Synapse Analytics pool for the data scientists. The solution must minimize costs.

Which type of pool should you recommend?

- A. a Data Explorer pool
- B. an Apache Spark pool
- C. a dedicated SQL pool
- D. a serverless SQL pool

Answer: B

Explanation:

In Azure Synapse, training machine learning models can be performed on the Apache Spark Pools with tools like PySpark/Python, Scala, or .NET.
Reference:
<https://docs.microsoft.com/en-us/azure/synapse-analytics/machine-learning/what-is-machine-learning>

NEW QUESTION 34

- (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()  
)
```

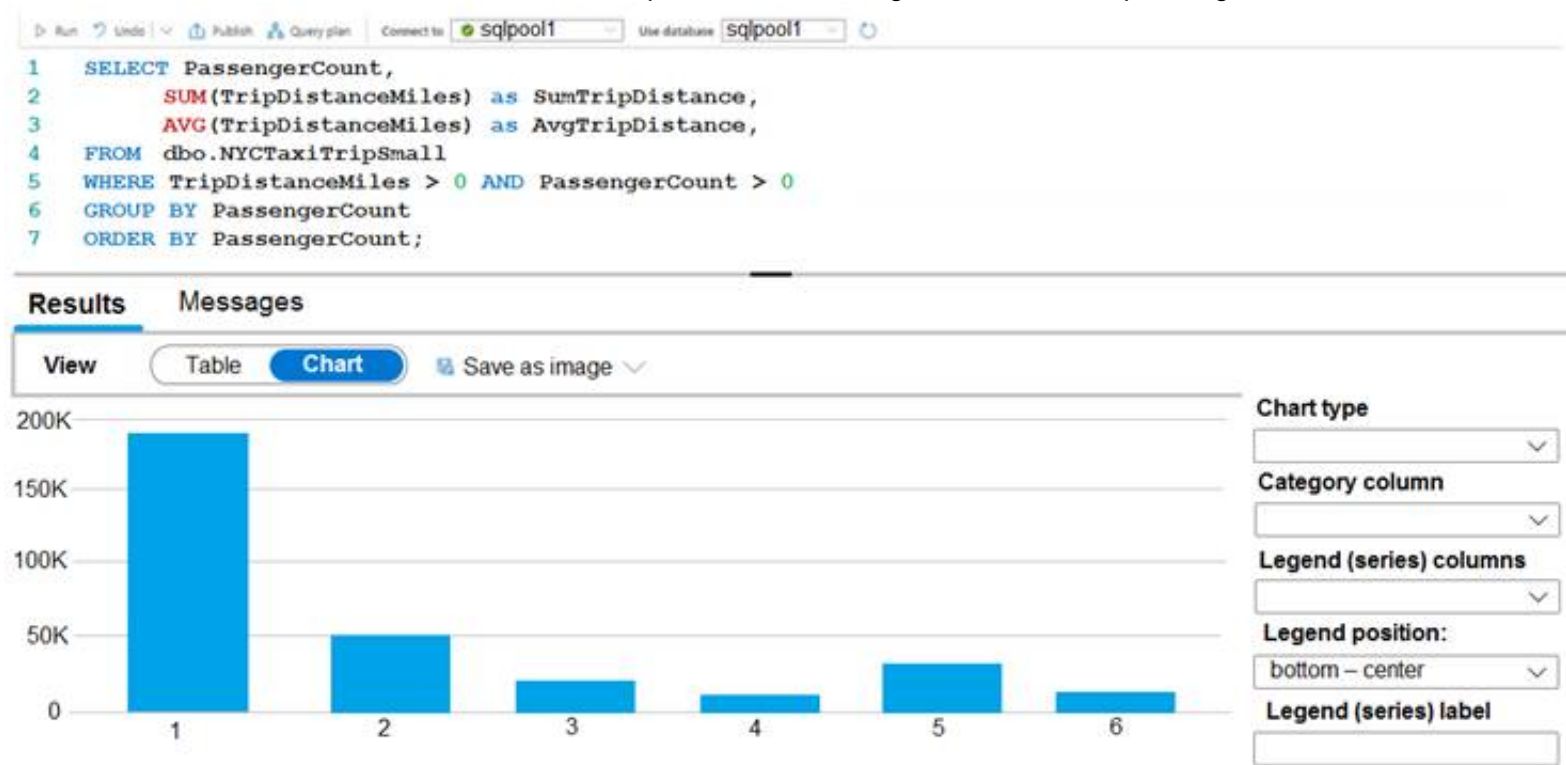
You need to improve the performance of the measure without affecting the logic or the results. What should you do?

- 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 36

- (Exam Topic 3)
You are using Azure Synapse Studio to explore a dataset that contains data about taxi trips.
You need to create a chart that will show the total trip distance according to the number of passengers as shown in the following exhibit.



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

Answer Area

Category column:

	▼
AvgTripDistance	
PassengerCount	
SumTripDistance	
TripDistanceMiles	

Legend (series) column:

	▼
AvgTripDistance	
PassengerCount	
SumTripDistance	
TripDistanceMiles	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

Category column:

	▼
AvgTripDistance	
PassengerCount	
SumTripDistance	
TripDistanceMiles	

Legend (series) column:

	▼
AvgTripDistance	
PassengerCount	
SumTripDistance	
TripDistanceMiles	

NEW QUESTION 38

- (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 42

- (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 47

- (Exam Topic 3)

You have the following code in an Azure Synapse notebook.

```
import matplotlib.pyplot as plt
x1 = [1, 3, 4, 5, 6, 7, 9]
y1 = [4, 7, 2, 4, 7, 8, 3]
x2 = [2, 4, 6, 8, 10]
y2 = [5, 6, 2, 6, 2]
plt.bar(x1, y1, label="Blue Item", color='b')
plt.bar(x2, y2, label="Green Item", color='g')
plt.plot()
plt.xlabel("Number")
plt.ylabel("Height")
plt.title("My Chart")
plt.legend()
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

Running the code will create a [answer choice] in the output cell.

The legend for the resulting chart will list [answer choice] in the legend.

clustered bar chart
histogram
line chart
stacked bar chart

one item
two items
five items
seven items

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

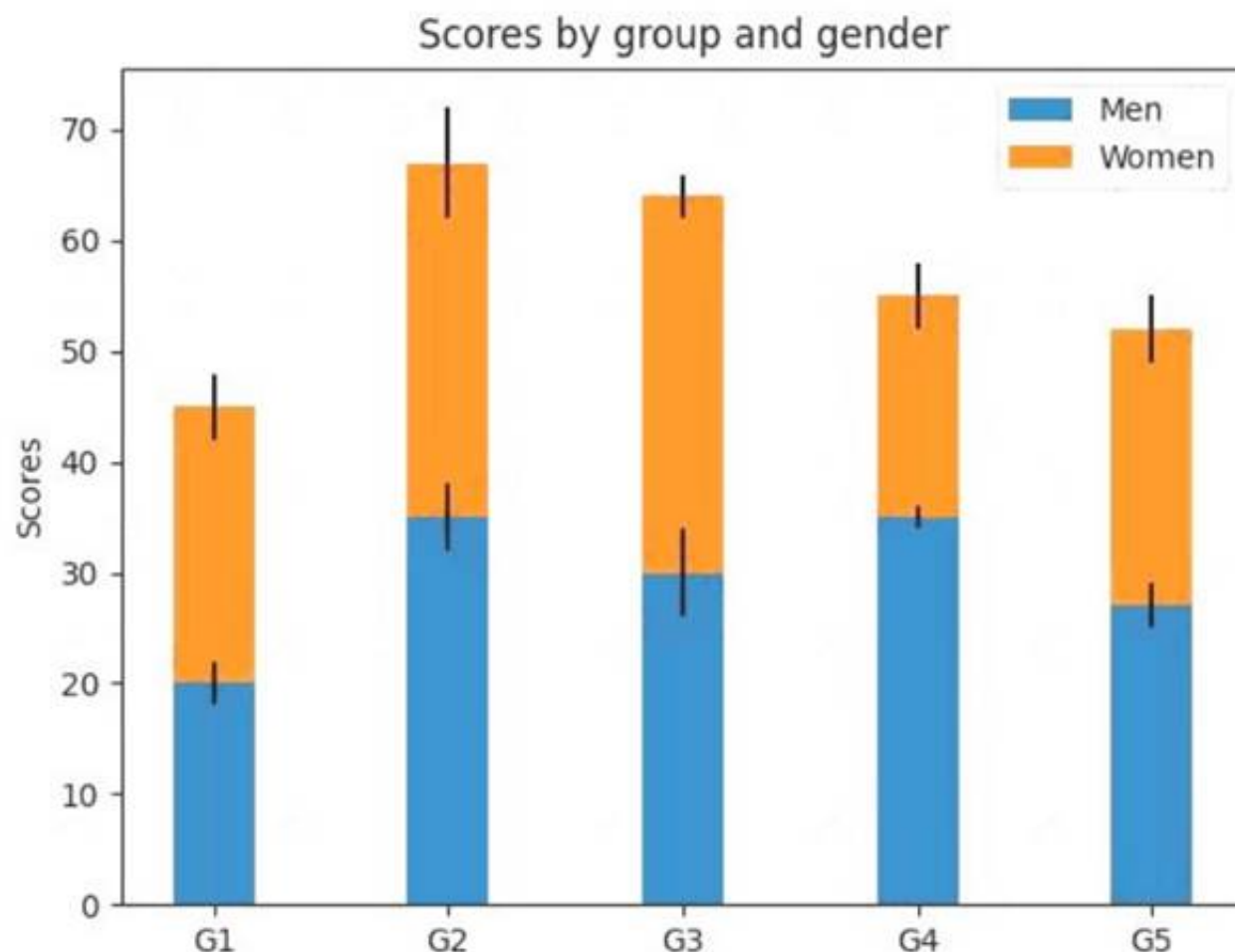
Box 1: stacked bar chart matplotlib.pyplot.bar makes a bar plot.

The bars are positioned at x with the given alignment. Their dimensions are given by height and width. The vertical baseline is bottom (default 0).

Many parameters can take either a single value applying to all bars or a sequence of values, one for each bar.

Stacked bars can be achieved by passing individual bottom values per bar. Stacked bar chart

This is an example of creating a stacked bar plot with error bars using bar. Note the parameters year used for error bars, and bottom to stack the women's bars on top of the men's bars.



```
import matplotlib.pyplot as plt
labels = ['G1', 'G2', 'G3', 'G4', 'G5']
men_means = [20, 35, 30, 35, 27]
women_means = [25, 32, 34, 20, 25]
men_std = [2, 3, 4, 1, 2]
women_std = [3, 5, 2, 3, 3]
width = 0.35 # the width of the bars: can also be len(x) sequence fig, ax = plt.subplots()
ax.bar(labels, men_means, width, yerr=men_std, label='Men')
ax.bar(labels, women_means, width, yerr=women_std, bottom=men_means, label='Women')
ax.set_ylabel('Scores') ax.set_title('Scores by group and gender') ax.legend()
plt.show()
```

Box 2: two items

Blue item and Green Item. matplotlib.legend

The legend module defines the Legend class, which is responsible for drawing legends associated with axes and/or figures.

Note: A Diagram Legend is an element that you can add to your diagram to provide information about the colors and/or line thicknesses and styles that have been used in the current diagram, where those colors and other styles have some particular meaning.

Reference: https://matplotlib.org/stable/api/_as_gen/matplotlib.pyplot.bar.html https://matplotlib.org/stable/gallery/lines_bars_and_markers/bar_stacked.html
https://matplotlib.org/stable/api/legend_api.html

NEW QUESTION 48

- (Exam Topic 3)

You are using an Azure Synapse Analytics serverless SQL pool to query network traffic logs in the Apache Parquet format. A sample of the data is shown in the following table.

source		destination	
name	ip	name	ip
Network01	192.168.0.1	Internet	0.0.0.0

You need to create a Transact-SQL query that will return the source IP address.

Which function should you use in the select statement to retrieve the source IP address?

- A. JSON_VALUE
- B. FOR.JSON
- C. CONVERT
- D. FIRST VALUE

Answer: A

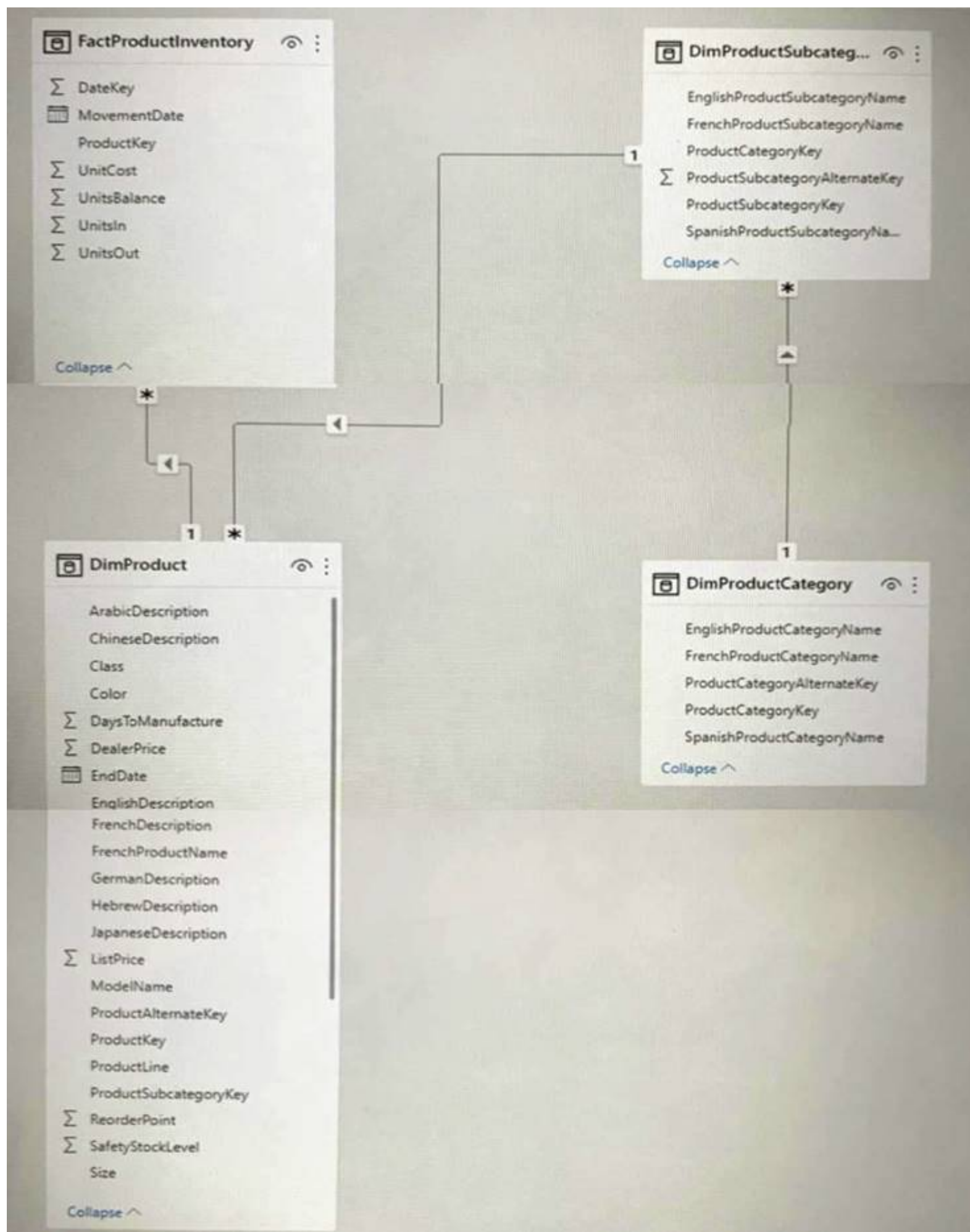
NEW QUESTION 51

- (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 denormalizing the data model. Does this meet the goal?

- A. Yes
- B. No

Answer: A

Explanation:

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 54

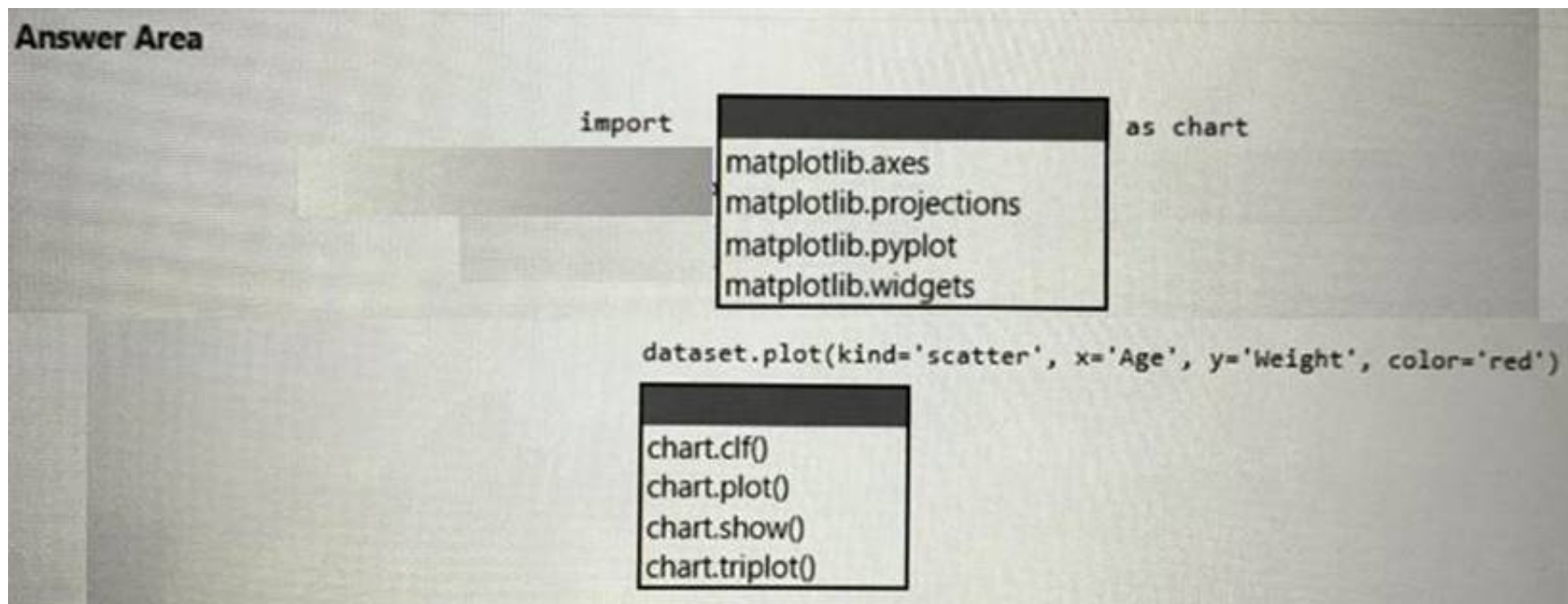
- (Exam Topic 3)

You are creating a Power BI Desktop report. You add a Python visual to the report page.

You plan to create a scatter chart to visualize the data. You add Python code to the Python script editor.

You need to create the scatter chart.

How should you complete the Python 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:

Box 1: matplotlib.pyplot

Create a scatter plot

Let's create a scatter plot to see if there's a correlation between age and weight. Under Paste or type your script code here, enter this code:

import matplotlib.pyplot as plt

dataset.plot(kind='scatter', x='Age', y='Weight', color='red') plt.show()

Box 2: chart.show()

Reference:

<https://docs.microsoft.com/en-us/power-bi/connect-data/desktop-python-visuals#create-a-scatter-plot>

NEW QUESTION 59

- (Exam Topic 3)

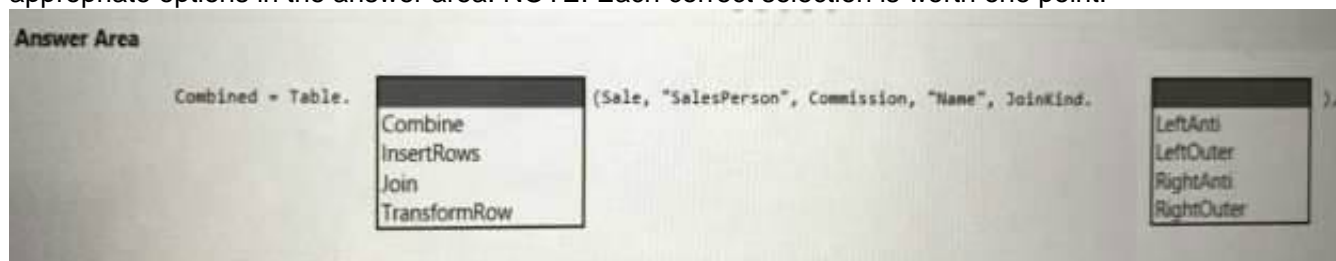
You use Advanced Editor in Power Query Editor to edit a query that references two tables named Sales and Commission. A sample of the data in the Sales table is shown in the following table.

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.

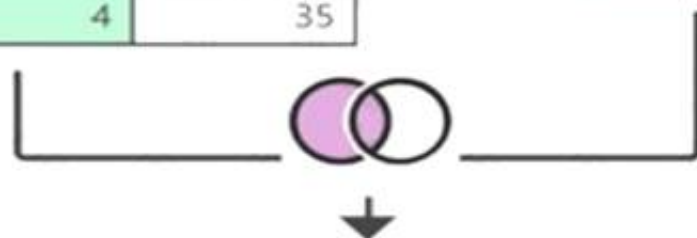
Diagram, table Description automatically generated

Left Table

Date	CountryID	Units
1/1/2020	1	40
1/2/2020	1	25
1/3/2020	3	30
1/4/2020	4	35

Right Table

ID	Country
1	USA
2	Canada
3	Panama



Merged Table

Date	CountryID	Units	Country
1/1/2020	1	40	USA
1/2/2020	1	25	USA
1/3/2020	3	30	Panama
1/4/2020	4	35	null

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

NEW QUESTION 61

- (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 63

- (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.

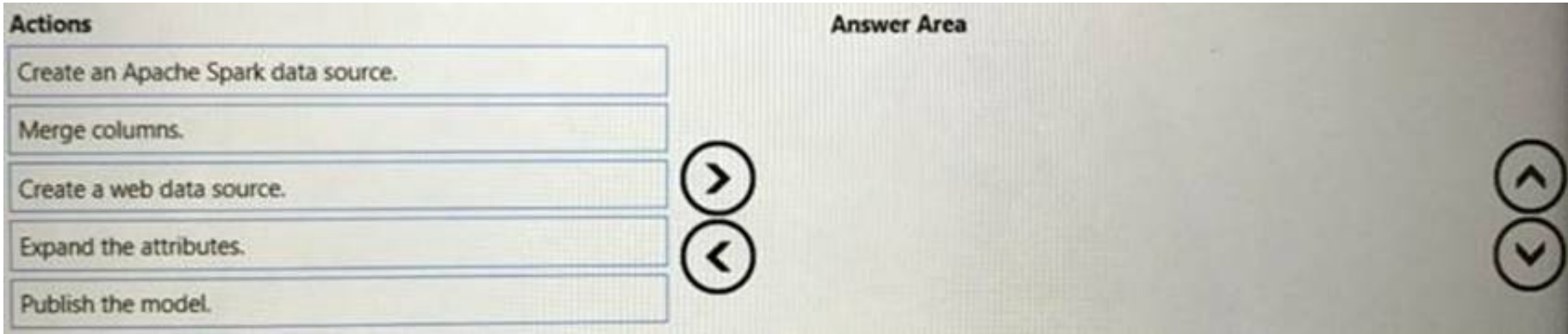
Reference: <https://docs.microsoft.com/en-us/azure/synapse-analytics/sql/develop-tables-temporary>

NEW QUESTION 65

- (Exam Topic 2)

You need to integrate the external data source to support the planned changes.

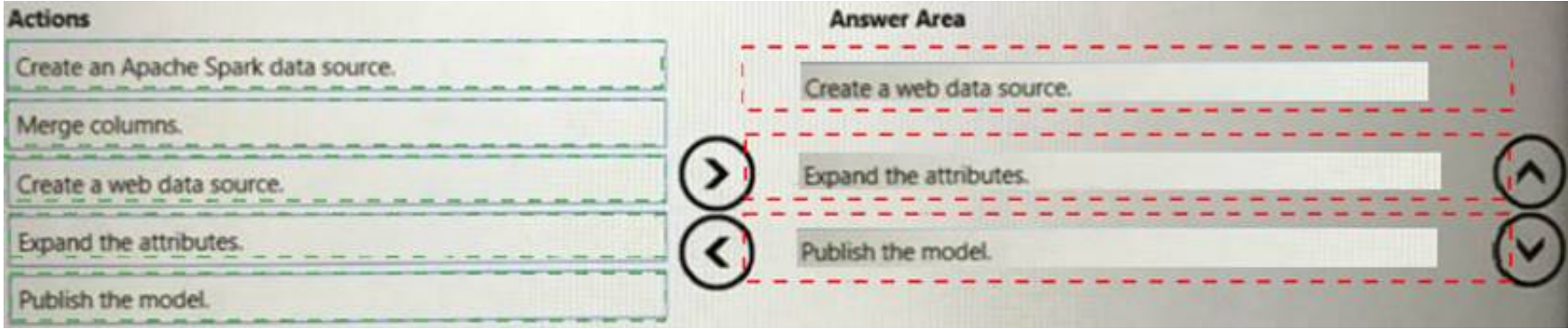
Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

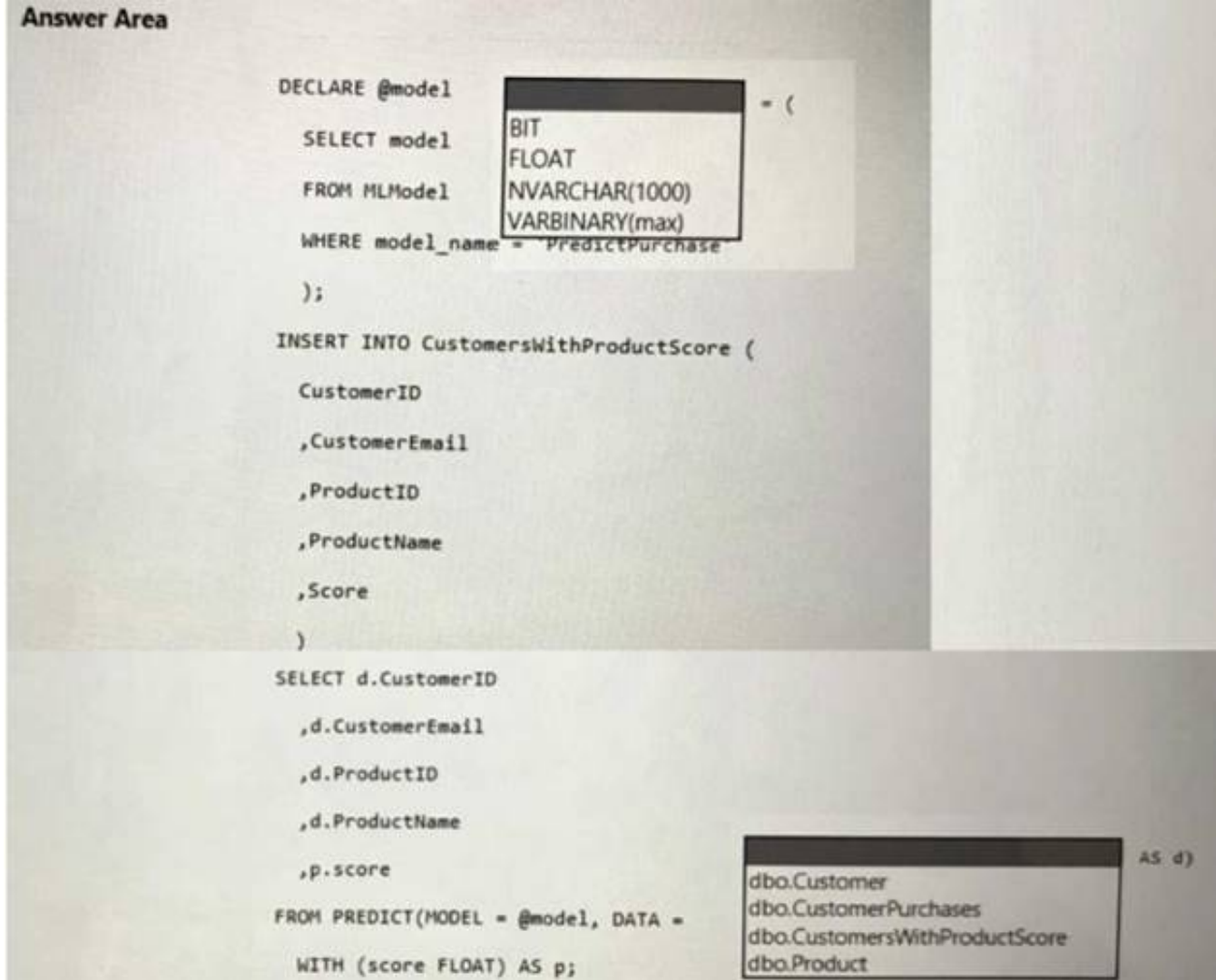


NEW QUESTION 70

- (Exam Topic 1)

You need to populate the CustomersWithProductScore table.

How should you complete the stored procedure? 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: FLOAT

Identify which customers should receive promotional emails based on their likelihood of purchasing promoted products.

FLOT is used in the last statement of the code: WITH (score FLOAT) as p; From syntax: MODEL

The MODEL parameter is used to specify the model used for scoring or prediction. The model is specified as a variable or a literal or a scalar expression.

Box 2: dbo.CustomerWithProductScore

Identify which customers should receive promotional emails based on their likelihood of purchasing promoted products.

Only table CustomerWithProductScore has the required filed score.

From the syntax: DATA

The DATA parameter is used to specify the data used for scoring or prediction. Data is specified in the form of a table source in the query. Table source can be a table, table alias, CTE alias, view, or table-valued function.

Reference: <https://docs.microsoft.com/en-us/sql/t-sql/queries/predict-transact-sql>

NEW QUESTION 71

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