Databricks

Exam Questions Databricks-Certified-Data-Engineer-Associate

Databricks Certified Data Engineer Associate Exam

NEW QUESTION 1
A data engineer has created a new database using the following command: CREATE DATABASE IF NOT EXISTS customer360;
In which of the following locations will the customer360 database be located?

A. dbfs:/user/hive/database/customer360
B. dbfs:/user/hive/warehouse
C. dbfs:/user/hive/customer360
D. More information is needed to determine the correct response

Answer: B

Explanation:
dbfs:/user/hive/warehouse - which is the default location

NEW QUESTION 2
Which of the following approaches should be used to send the Databricks Job owner an email in the case that the Job fails?

A. Manually programming in an alert system in each cell of the Notebook
B. Setting up an Alert in the Job page
C. Setting up an Alert in the Notebook
D. There is no way to notify the Job owner in the case of Job failure
E. MLflow Model Registry Webhooks

Answer: B

Explanation:
https://docs.databricks.com/en/workflows/jobs/job-notifications.html

NEW QUESTION 3
Which of the following describes when to use the CREATE STREAMING LIVE TABLE (formerly CREATE INCREMENTAL LIVE TABLE) syntax over the CREATE LIVE TABLE syntax when creating Delta Live Tables (DLT) tables using SQL?

A. CREATE STREAMING LIVE TABLE should be used when the subsequent step in the DLT pipeline is static.
B. CREATE STREAMING LIVE TABLE should be used when data needs to be processed incrementally.
C. CREATE STREAMING LIVE TABLE is redundant for DLT and it does not need to be used.
D. CREATE STREAMING LIVE TABLE should be used when data needs to be processed through complicated aggregations.
E. CREATE STREAMING LIVE TABLE should be used when the previous step in the DLT pipeline is static.

Answer: B

Explanation:
The CREATE STREAMING LIVE TABLE syntax is used when you want to create Delta Live Tables (DLT) tables that are designed for processing data incrementally. This is typically used when your data pipeline involves streaming or incremental data updates, and you want the table to stay up to date as new data arrives. It allows you to define tables that can handle data changes incrementally without the need for full table refreshes.

NEW QUESTION 4
A data analyst has developed a query that runs against Delta table. They want help from the data engineering team to implement a series of tests to ensure the data returned by the query is clean. However, the data engineering team uses Python for its tests rather than SQL.
Which of the following operations could the data engineering team use to run the query and operate with the results in PySpark?

A. SELECT * FROM sales
B. spark.delta.table
C. spark.sql
D. There is no way to share data between PySpark and SQL.
E. spark.table

Answer: C

Explanation:
from pyspark.sql import SparkSession spark = SparkSession.builder.getOrCreate()
df = spark.sql("SELECT * FROM sales") print(df.count())

NEW QUESTION 5
A data analysis team has noticed that their Databricks SQL queries are running too slowly when connected to their always-on SQL endpoint. They claim that this issue is present when many members of the team are running small queries simultaneously. They ask the data engineering team for help. The data engineering team notices that each of the team's queries uses the same SQL endpoint.
Which of the following approaches can the data engineering team use to improve the latency of the team's queries?

A. They can increase the cluster size of the SQL endpoint.
B. They can increase the maximum bound of the SQL endpoint's scaling range.
C. They can turn on the Auto Stop feature for the SQL endpoint.
D. They can turn on the Serverless feature for the SQL endpoint.
E. They can turn on the Serverless feature for the SQL endpoint and change the Spot Instance Policy to "Reliability Optimized."

Answer: A

Explanation:
When many users are running small queries simultaneously on a SQL endpoint, the database can become overloaded, causing slow query execution times. By increasing the cluster size of the SQL endpoint, the database can handle more simultaneous queries, resulting in faster query execution times.

NEW QUESTION 6
A data organization leader is upset about the data analysis team’s reports being different from the data engineering team’s reports. The leader believes the siloed nature of their organization’s data engineering and data analysis architectures is to blame.
Which of the following describes how a data lakehouse could alleviate this issue?

A. Both teams would autoscale their work as data size evolves
B. Both teams would use the same source of truth for their work
C. Both teams would reorganize to report to the same department
D. Both teams would be able to collaborate on projects in real-time
E. Both teams would respond more quickly to ad-hoc requests

Answer: B

Explanation:
A data lakehouse is designed to unify the data engineering and data analysis architectures by integrating features of both data lakes and data warehouses. One of the key benefits of a data lakehouse is that it provides a common, centralized data repository (the "lake") that serves as a single source of truth for data storage and analysis. This allows both data engineering and data analysis teams to work with the same consistent data sets, reducing discrepancies and ensuring that the reports generated by both teams are based on the same underlying data.

NEW QUESTION 7
A data engineer is attempting to drop a Spark SQL table my_table and runs the following command:
DROP TABLE IF EXISTS my_table;
After running this command, the engineer notices that the data files and metadata files have been deleted from the file system.
Which of the following describes why all of these files were deleted?

A. The table was managed
B. The table's data was smaller than 10 GB
C. The table's data was larger than 10 GB
D. The table was external
E. The table did not have a location

Answer: A

Explanation:
managed tables files and metadata are managed by metastore and will be deleted when the table is dropped . while external tables the metadata is stored in a external location. hence when a external table is dropped you clear off only the metadata and the files (data) remain.

NEW QUESTION 8
Which of the following data lakehouse features results in improved data quality over a traditional data lake?

A. A data lakehouse provides storage solutions for structured and unstructured data.
B. A data lakehouse supports ACID-compliant transactions.
C. A data lakehouse allows the use of SQL queries to examine data.
D. A data lakehouse stores data in open formats.
E. A data lakehouse enables machine learning and artificial Intelligence workloads.

Answer: B

Explanation:
One of the key features of a data lakehouse that results in improved data quality over a traditional data lake is its support for ACID (Atomicity, Consistency, Isolation, Durability) transactions. ACID transactions provide data integrity and consistency guarantees, ensuring that operations on the data are reliable and that data is not left in an inconsistent state due to failures or concurrent access. In a traditional data lake, such transactional guarantees are often lacking, making it challenging to maintain data quality,
especially in scenarios involving multiple data writes, updates, or complex transformations. A data lakehouse, by offering ACID compliance, helps maintain data quality by providing strong consistency and reliability, which is crucial for data pipelines and analytics.

NEW QUESTION 9
A data engineering team has noticed that their Databricks SQL queries are running too slowly when they are submitted to a non-running SQL endpoint. The data engineering team wants this issue to be resolved.
Which of the following approaches can the team use to reduce the time it takes to return results in this scenario?

A. They can turn on the Serverless feature for the SQL endpoint and change the Spot Instance Policy to "Reliability Optimized."
B. They can turn on the Auto Stop feature for the SQL endpoint.
C. They can increase the cluster size of the SQL endpoint.
D. They can turn on the Serverless feature for the SQL endpoint.
E. They can increase the maximum bound of the SQL endpoint's scaling range

Answer: C

Explanation:
https://www.databricks.com/blog/2022/03/10/top-5-databricks-performance- tips.html

NEW QUESTION 10

Which of the following can be used to simplify and unify siloed data architectures that are specialized for specific use cases?

A. None of these
B. Data lake
C. Data warehouse
D. All of these
E. Data lakehouse

Answer: E

NEW QUESTION 10
A data engineer only wants to execute the final block of a Python program if the Python variable day_of_week is equal to 1 and the Python variable review_period is True.
Which of the following control flow statements should the data engineer use to begin this conditionally executed code block?

A. if day_of_week = 1 and review_period:
B. if day_of_week = 1 and review_period = "True":
C. if day_of_week == 1 and review_period == "True":
D. if day_of_week == 1 and review_period:
E. if day_of_week = 1 & review_period: = "True":

Answer: D

Explanation:
This statement will check if the variable day_of_week is equal to 1 and if the variable review_period evaluates to a truthy value. The use of the double equal sign (==) in the comparison of day_of_week is important, as a single equal sign (=) would be used to assign a value to the variable instead of checking its value. The use of a single ampersand (&) instead of the keyword and is not valid syntax in Python. The use of quotes around True in options B and C will result in a string comparison, which will not evaluate to True even if the value of review_period is True.

NEW QUESTION 15
Which of the following is a benefit of the Databricks Lakehouse Platform embracing open source technologies?

A. Cloud-specific integrations
B. Simplified governance
C. Ability to scale storage
D. Ability to scale workloads
E. Avoiding vendor lock-in

Answer: E

Explanation:
https://double.cloud/blog/posts/2023/01/break-free-from-vendor-lock-in-with-open-source-tech/

NEW QUESTION 18
Which of the following benefits is provided by the array functions from Spark SQL?

A. An ability to work with data in a variety of types at once
B. An ability to work with data within certain partitions and windows
C. An ability to work with time-related data in specified intervals
D. An ability to work with complex, nested data ingested from JSON files
E. An ability to work with an array of tables for procedural automation

Answer: D

Explanation:
Array functions in Spark SQL are primarily used for working with arrays and complex, nested data structures, such as those often encountered when ingesting JSON files. These functions allow you to manipulate and query nested arrays and structures within your data, making it easier to extract and work with specific elements or values within complex data formats. While some of the other options (such as option A for working with different data types) are features of Spark SQL or SQL in general, array functions specifically excel at handling complex, nested data structures like those found in JSON files.

NEW QUESTION 20
Which of the following statements regarding the relationship between Silver tables and Bronze tables is always true?

A. Silver tables contain a less refined, less clean view of data than Bronze data.
B. Silver tables contain aggregates while Bronze data is unaggregated.
C. Silver tables contain more data than Bronze tables.
D. Silver tables contain a more refined and cleaner view of data than Bronze tables.
E. Silver tables contain less data than Bronze tables.

Answer: D

Explanation:
https://www.databricks.com/glossary/medallion-architecture

NEW QUESTION 25
Which of the following tools is used by Auto Loader process data incrementally?

A. Checkpointing
B. Spark Structured Streaming
C. Data Explorer
D. Unity Catalog
E. Databricks SQL

Answer: B

Explanation:
The Auto Loader process in Databricks is typically used in conjunction with Spark Structured Streaming to process data incrementally. Spark Structured Streaming is a real-time data processing framework that allows you to process data streams incrementally as new data arrives. The Auto Loader is a feature in Databricks that works with Structured Streaming to automatically detect and process new data files as they are added to a specified data source location. It allows for incremental data processing without the need for manual intervention.
How does Auto Loader track ingestion progress? As files are discovered, their metadata is persisted in a scalable key-value store (RocksDB) in the checkpoint location of your Auto Loader pipeline. This key-value store ensures that data is processed exactly once. In case of failures, Auto Loader can resume from where it left off by information stored in the checkpoint location and continue to provide exactly-once guarantees when writing data into Delta Lake. You don’t need to maintain or manage any state yourself to achieve fault tolerance or exactly-once semantics.https://docs.databricks.com/ingestion/auto- loader/index.html

NEW QUESTION 29
In order for Structured Streaming to reliably track the exact progress of the processing so that it can handle any kind of failure by restarting and/or reprocessing, which of the following two approaches is used by Spark to record the offset range of the data being processed in each trigger?

A. Checkpointing and Write-ahead Logs
B. Structured Streaming cannot record the offset range of the data being processed in each trigger.
C. Replayable Sources and Idempotent Sinks
D. Write-ahead Logs and Idempotent Sinks
E. Checkpointing and Idempotent Sinks

Answer: A

Explanation:
The engine uses checkpointing and write-ahead logs to record the offset range of the data being processed in each trigger. -- in the link search for "The engine uses " youll find the answer.https://spark.apache.org/docs/latest/structured-streaming- programming-guide.html#:~:text=The%20engine%20uses%20checkpointing%20and,being%20processe d%20in%20each%20trigger.

NEW QUESTION 31
A data analyst has a series of queries in a SQL program. The data analyst wants this program to run every day. They only want the final query in the program to run on Sundays. They ask for help from the data engineering team to complete this task.
Which of the following approaches could be used by the data engineering team to complete this task?

A. They could submit a feature request with Databricks to add this functionality.
B. They could wrap the queries using PySpark and use Python’s control flow system to determine when to run the final query.
C. They could only run the entire program on Sundays.
D. They could automatically restrict access to the source table in the final query so that it is only accessible on Sundays.
E. They could redesign the data model to separate the data used in the final query into a new table.

Answer: B

NEW QUESTION 36
Which of the following benefits of using the Databricks Lakehouse Platform is provided by Delta Lake?

A. The ability to manipulate the same data using a variety of languages
B. The ability to collaborate in real time on a single notebook
C. The ability to set up alerts for query failures
D. The ability to support batch and streaming workloads
E. The ability to distribute complex data operations

Answer: D

Explanation:
Delta Lake is a key component of the Databricks Lakehouse Platform that provides several benefits, and one of the most significant benefits is its ability to support both batch and streaming workloads seamlessly. Delta Lake allows you to process and analyze data in real-time (streaming) as well as in batch, making it a versatile choice for various data processing needs. While the other options may be benefits or capabilities of Databricks or the Lakehouse Platform in general, they are not specifically associated with Delta Lake.

NEW QUESTION 38
A dataset has been defined using Delta Live Tables and includes an expectations clause:
CONSTRAINT valid_timestamp EXPECT (timestamp > '2020-01-01') ON VIOLATION DROP ROW
What is the expected behavior when a batch of data containing data that violates these constraints is processed?

A. Records that violate the expectation are dropped from the target dataset and loaded into a quarantine table.
B. Records that violate the expectation are added to the target dataset and flagged as invalid in a field added to the target dataset.
C. Records that violate the expectation are dropped from the target dataset and recorded as invalid in the event log.
D. Records that violate the expectation are added to the target dataset and recorded as invalid in the event log.
E. Records that violate the expectation cause the job to fail.

Answer: C

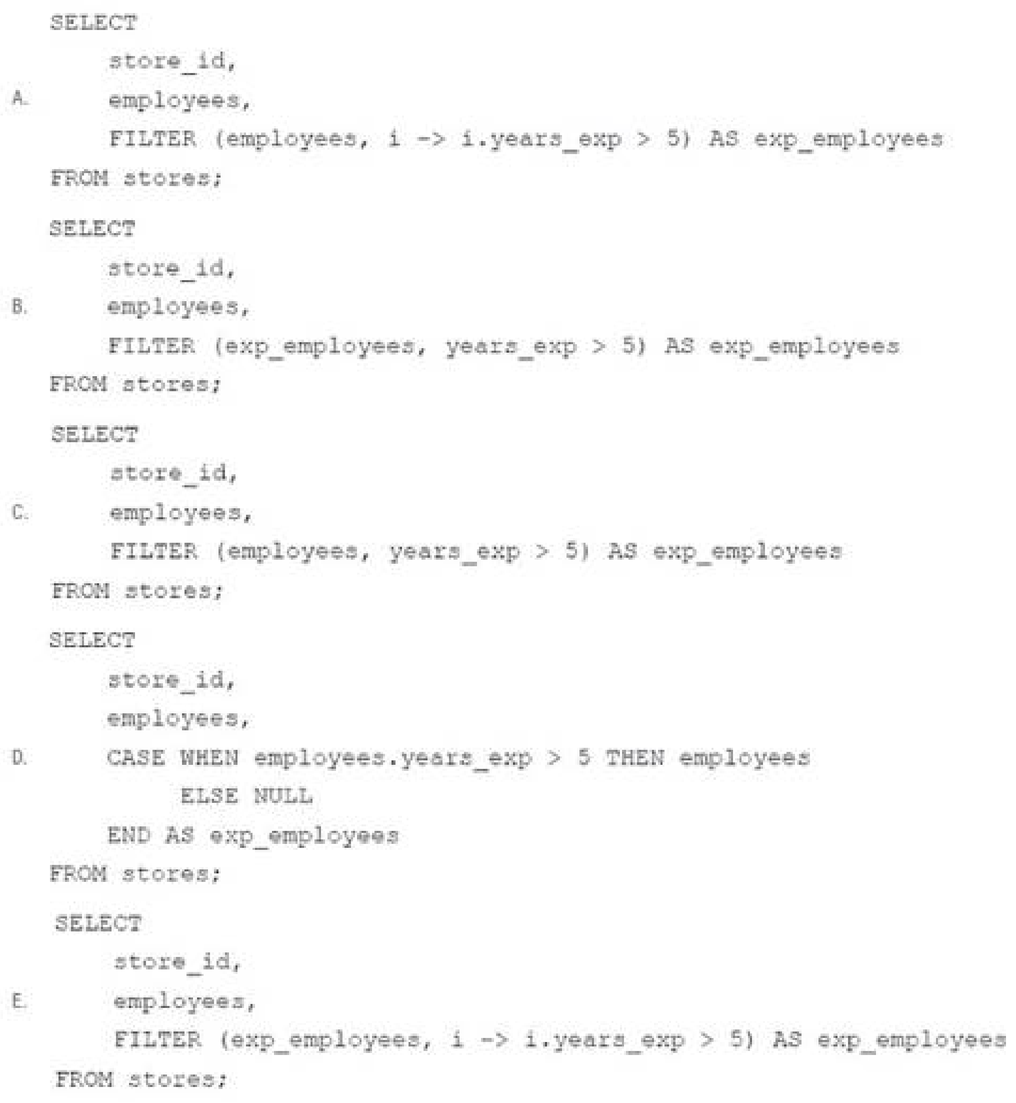
Explanation:

With the defined constraint and expectation clause, when a batch of data is processed, any records that violate the expectation (in this case, where the timestamp is not greater than '2020-01-01') will be dropped from the target dataset. These dropped records will also be recorded as invalid in the event log, allowing for auditing and tracking of the data quality issues without causing the entire job to fail. https://docs.databricks.com/en/delta-live-tables/expectations.html

NEW QUESTION 39

A data engineer needs to apply custom logic to identify employees with more than 5 years of experience in array column employees in table stores. The custom logic should create a new column exp_employees that is an array of all of the employees with more than 5 years of experience for each row. In order to apply this custom logic at scale, the data engineer wants to use the FILTER higher-order function.

Which of the following code blocks successfully completes this task?



```
    SELECT
        store_id,
A.      employees,
        FILTER (employees, i -> i.years_exp > 5) AS exp_employees
    FROM stores;

    SELECT
        store_id,
B.      employees,
        FILTER (exp_employees, years_exp > 5) AS exp_employees
    FROM stores;

    SELECT
        store_id,
C.      employees,
        FILTER (employees, years_exp > 5) AS exp_employees
    FROM stores;

    SELECT
        store_id,
        employees,
D.      CASE WHEN employees.years_exp > 5 THEN employees
             ELSE NULL
        END AS exp_employees
    FROM stores;

    SELECT
        store_id,
E.      employees,
        FILTER (exp_employees, i -> i.years_exp > 5) AS exp_employees
    FROM stores;
```

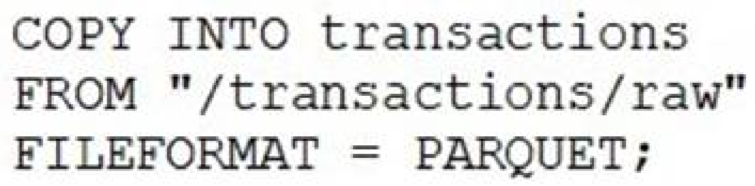
A. Option A
B. Option B
C. Option C
D. Option D
E. Option E

Answer: A

NEW QUESTION 42

A data engineer runs a statement every day to copy the previous day’s sales into the table transactions. Each day’s sales are in their own file in the location "/transactions/raw".

Today, the data engineer runs the following command to complete this task:



```
COPY INTO transactions
FROM "/transactions/raw"
FILEFORMAT = PARQUET;
```

After running the command today, the data engineer notices that the number of records in table transactions has not changed.

Which of the following describes why the statement might not have copied any new records into the table?

A. The format of the files to be copied were not included with the FORMAT_OPTIONS keyword.
B. The names of the files to be copied were not included with the FILES keyword.
C. The previous day’s file has already been copied into the table.
D. The PARQUET file format does not support COPY INTO.
E. The COPY INTO statement requires the table to be refreshed to view the copied rows.

Answer: C

Explanation:

https://docs.databricks.com/en/ingestion/copy-into/index.html The COPY
INTO SQL command lets you load data from a file location into a Delta table. This is a re- triable and idempotent operation; files in the source location that have already been loaded are skipped. if there are no new records, the only consistent choice is C no new files were loaded because already loaded files were skipped.

NEW QUESTION 46

A data engineer wants to schedule their Databricks SQL dashboard to refresh once per day, but they only want the associated SQL endpoint to be running when it is necessary.

Which of the following approaches can the data engineer use to minimize the total running time of the SQL endpoint used in the refresh schedule of their dashboard?

A. They can ensure the dashboard's SQL endpoint matches each of the queries' SQL endpoints.
B. They can set up the dashboard's SQL endpoint to be serverless.
C. They can turn on the Auto Stop feature for the SQL endpoint.
D. They can reduce the cluster size of the SQL endpoint.
E. They can ensure the dashboard's SQL endpoint is not one of the included query's SQL endpoint.

Answer: C

NEW QUESTION 51
Which of the following describes the relationship between Gold tables and Silver tables?

A. Gold tables are more likely to contain aggregations than Silver tables.
B. Gold tables are more likely to contain valuable data than Silver tables.
C. Gold tables are more likely to contain a less refined view of data than Silver tables.
D. Gold tables are more likely to contain more data than Silver tables.
E. Gold tables are more likely to contain truthful data than Silver tables.

Answer: A

Explanation:
In some data processing pipelines, especially those following a typical "Bronze-Silver-Gold" data lakehouse architecture, Silver tables are often considered a more refined version of the raw or Bronze data. Silver tables may include data cleansing, schema enforcement, and some initial transformations. Gold tables, on the other hand, typically represent a stage where data is further enriched, aggregated, and processed to provide valuable insights for analytical purposes. This could indeed involve more aggregations compared to Silver tables.

NEW QUESTION 53
A Delta Live Table pipeline includes two datasets defined using STREAMING LIVE TABLE. Three datasets are defined against Delta Lake table sources using LIVE TABLE.
The table is configured to run in Production mode using the Continuous Pipeline Mode. Assuming previously unprocessed data exists and all definitions are valid, what is the
expected outcome after clicking Start to update the pipeline?

A. All datasets will be updated at set intervals until the pipeline is shut dow
B. The compute resources will persist to allow for additional testing.
C. All datasets will be updated once and the pipeline will persist without any processin
D. The compute resources will persist but go unused.
E. All datasets will be updated at set intervals until the pipeline is shut dow
F. The compute resources will be deployed for the update and terminated when the pipeline is stopped.
G. All datasets will be updated once and the pipeline will shut dow
H. The compute resources will be terminated.
I. All datasets will be updated once and the pipeline will shut dow
J. The compute resources will persist to allow for additional testing.

Answer: C

Explanation:
In a Delta Live Table pipeline running in Continuous Pipeline Mode, when you click Start to update the pipeline, the following outcome is expected: All datasets defined using STREAMING LIVE TABLE and LIVE TABLE against Delta Lake table sources will be updated at set intervals. The compute resources will be deployed for the update process and will be active during the execution of the pipeline. The compute resources will be terminated when the pipeline is stopped or shut down. This mode allows for continuous and periodic updates to the datasets as new data arrives or changes in the
underlying Delta Lake tables occur. The compute resources are provisioned and utilized during the update intervals to process the data and perform the necessary operations.

NEW QUESTION 55
A single Job runs two notebooks as two separate tasks. A data engineer has noticed that one of the notebooks is running slowly in the Job's current run. The data engineer asks a tech lead for help in identifying why this might be the case.
Which of the following approaches can the tech lead use to identify why the notebook is running slowly as part of the Job?

A. They can navigate to the Runs tab in the Jobs UI to immediately review the processing notebook.
B. They can navigate to the Tasks tab in the Jobs UI and click on the active run to review the processing notebook.
C. They can navigate to the Runs tab in the Jobs UI and click on the active run to review the processing notebook.
D. There is no way to determine why a Job task is running slowly.
E. They can navigate to the Tasks tab in the Jobs UI to immediately review the processing notebook.

Answer: C

Explanation:
The job run details page contains job output and links to logs, including information about the success or failure of each task in the job run. You can access job run details from the Runs tab for the job. To view job run details from the Runs tab, click the link for the run in the Start time column in the runs list view. To return to the Runs tab for the job, click the Job ID value.
If the job contains multiple tasks, click a task to view task run details, including: the cluster that ran the task
the Spark UI for the task logs for the task
metrics for the task
https://docs.databricks.com/en/workflows/jobs/monitor-job-runs.html#job-run-details

NEW QUESTION 59

A data engineer has been given a new record of data:
id STRING = 'a1'
rank INTEGER = 6 rating FLOAT = 9.4
Which of the following SQL commands can be used to append the new record to an existing Delta table my_table?

A. INSERT INTO my_table VALUES ('a1', 6, 9.4)
B. my_table UNION VALUES ('a1', 6, 9.4)
C. INSERT VALUES ('a1' , 6, 9.4) INTO my_table
D. UPDATE my_table VALUES ('a1', 6, 9.4)
E. UPDATE VALUES ('a1', 6, 9.4) my_table

Answer: A

NEW QUESTION 62
A data engineer has left the organization. The data team needs to transfer ownership of the data engineer's Delta tables to a new data engineer. The new data engineer is the lead engineer on the data team.
Assuming the original data engineer no longer has access, which of the following individuals must be the one to transfer ownership of the Delta tables in Data Explorer?

A. Databricks account representative
B. This transfer is not possible
C. Workspace administrator
D. New lead data engineer
E. Original data engineer

Answer: C

Explanation:
https://docs.databricks.com/sql/admin/transfer-ownership.html

NEW QUESTION 65
A data engineer and data analyst are working together on a data pipeline. The data engineer is working on the raw, bronze, and silver layers of the pipeline using Python, and the data analyst is working on the gold layer of the pipeline using SQL. The raw source of the pipeline is a streaming input. They now want to migrate their pipeline to use Delta Live Tables.
Which of the following changes will need to be made to the pipeline when migrating to Delta Live Tables?

A. None of these changes will need to be made
B. The pipeline will need to stop using the medallion-based multi-hop architecture
C. The pipeline will need to be written entirely in SQL
D. The pipeline will need to use a batch source in place of a streaming source
E. The pipeline will need to be written entirely in Python

Answer: A

NEW QUESTION 70
Which of the following data workloads will utilize a Gold table as its source?

A. A job that enriches data by parsing its timestamps into a human-readable format
B. A job that aggregates uncleaned data to create standard summary statistics
C. A job that cleans data by removing malformatted records
D. A job that queries aggregated data designed to feed into a dashboard
E. A job that ingests raw data from a streaming source into the Lakehouse

Answer: D

NEW QUESTION 73
A dataset has been defined using Delta Live Tables and includes an expectations clause:
CONSTRAINT valid_timestamp EXPECT (timestamp > '2020-01-01') ON VIOLATION FAIL UPDATE
What is the expected behavior when a batch of data containing data that violates these constraints is processed?

A. Records that violate the expectation are dropped from the target dataset and recorded as invalid in the event log.
B. Records that violate the expectation cause the job to fail.
C. Records that violate the expectation are dropped from the target dataset and loaded into a quarantine table.
D. Records that violate the expectation are added to the target dataset and recorded as invalid in the event log.
E. Records that violate the expectation are added to the target dataset and flagged as invalid in a field added to the target dataset.

Answer: B

Explanation:
https://docs.databricks.com/en/delta-live-tables/expectations.html Action
Result
warn (default)
Invalid records are written to the target; failure is reported as a metric for the dataset. drop
Invalid records are dropped before data is written to the target; failure is reported as a metrics for the dataset.
fail
Invalid records prevent the update from succeeding. Manual intervention is required before re-processing.

NEW QUESTION 77

An engineering manager uses a Databricks SQL query to monitor ingestion latency for each data source. The manager checks the results of the query every day, but they are manually rerunning the query each day and waiting for the results.
Which of the following approaches can the manager use to ensure the results of the query are updated each day?

A. They can schedule the query to refresh every 1 day from the SQL endpoint's page in Databricks SQL.
B. They can schedule the query to refresh every 12 hours from the SQL endpoint's page in Databricks SQL.
C. They can schedule the query to refresh every 1 day from the query's page in Databricks SQL.
D. They can schedule the query to run every 1 day from the Jobs UI.
E. They can schedule the query to run every 12 hours from the Jobs UI.

Answer: C

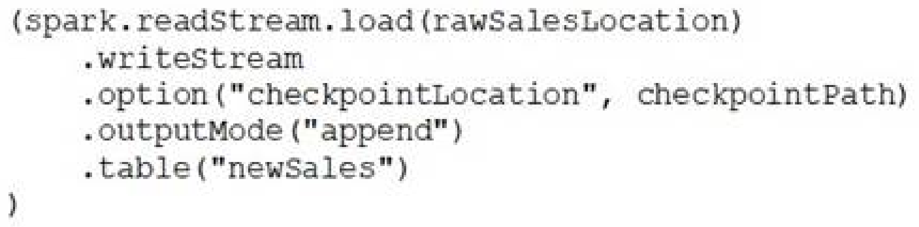
NEW QUESTION 80
In which of the following scenarios should a data engineer use the MERGE INTO command instead of the INSERT INTO command?

A. When the location of the data needs to be changed
B. When the target table is an external table
C. When the source table can be deleted
D. When the target table cannot contain duplicate records
E. When the source is not a Delta table

Answer: D

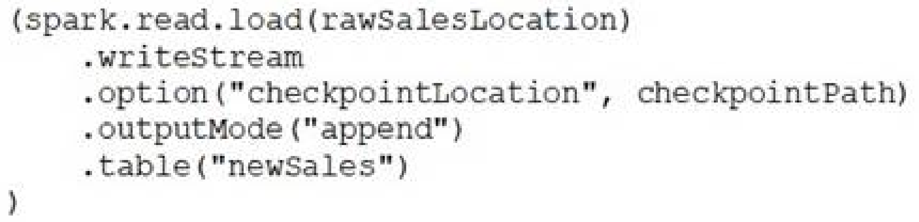
Explanation:
With merge , you can avoid inserting the duplicate records. The dataset containing the new logs needs to be deduplicated within itself. By the SQL semantics of merge, it matches and deduplicates the new data with the existing data in the table, but if
there is duplicate data within the new dataset, it is inserted.https://docs.databricks.com/en/delta/merge.html#:~:text=With%20merge%20%2C
%20you%20can%20avoid%20inserting%20the%20duplicate%20records.&text=The%20dat
aset%20containing%20the%20new,new%20dataset%2C%20it%20is%20inserted.

NEW QUESTION 81
Which of the following Structured Streaming queries is performing a hop from a Silver table to a Gold table?
A.



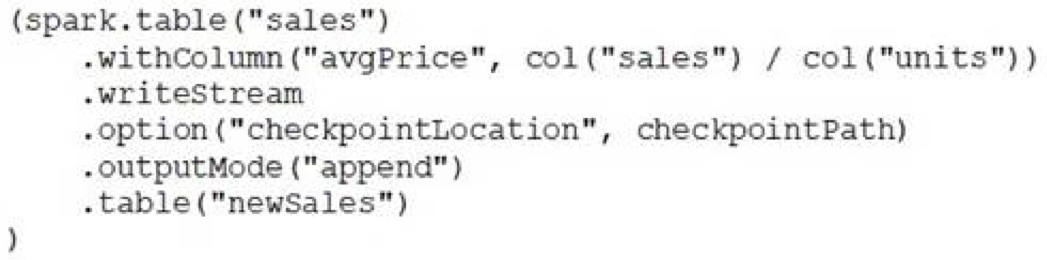
```
(spark.readStream.load(rawSalesLocation)
    .writeStream
    .option("checkpointLocation", checkpointPath)
    .outputMode("append")
    .table("newSales")
)
```

B.



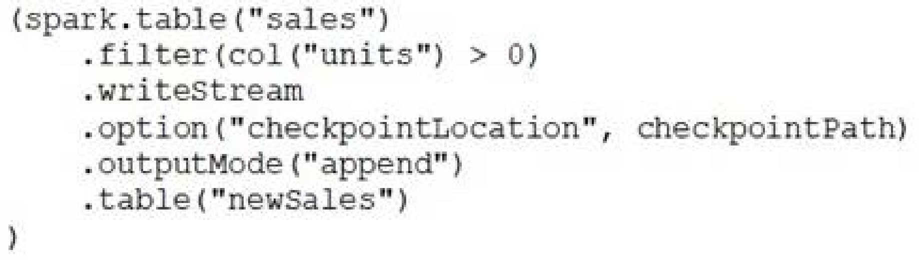
```
(spark.read.load(rawSalesLocation)
    .writeStream
    .option("checkpointLocation", checkpointPath)
    .outputMode("append")
    .table("newSales")
)
```

C.



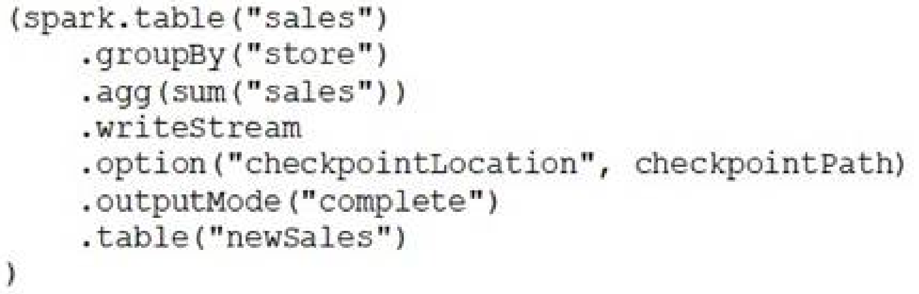
```
(spark.table("sales")
    .withColumn("avgPrice", col("sales") / col("units"))
    .writeStream
    .option("checkpointLocation", checkpointPath)
    .outputMode("append")
    .table("newSales")
)
```

D.



```
(spark.table("sales")
    .filter(col("units") > 0)
    .writeStream
    .option("checkpointLocation", checkpointPath)
    .outputMode("append")
    .table("newSales")
)
```

E.



```
(spark.table("sales")
    .groupBy("store")
    .agg(sum("sales"))
    .writeStream
    .option("checkpointLocation", checkpointPath)
    .outputMode("complete")
    .table("newSales")
)
```

A.

Answer: E

NEW QUESTION 85
A data engineer has a single-task Job that runs each morning before they begin working. After identifying an upstream data issue, they need to set up another task to run a new notebook prior to the original task.
Which of the following approaches can the data engineer use to set up the new task?

A. They can clone the existing task in the existing Job and update it to run the new notebook.
B. They can create a new task in the existing Job and then add it as a dependency of the original task.
C. They can create a new task in the existing Job and then add the original task as a dependency of the new task.
D. They can create a new job from scratch and add both tasks to run concurrently.
E. They can clone the existing task to a new Job and then edit it to run the new notebook.

Answer: B

Explanation:
To set up the new task to run a new notebook prior to the original task in a single-task Job, the data engineer can use the following approach: In the existing Job, create a new task that corresponds to the new notebook that needs to be run. Set up the new task with the appropriate configuration, specifying the notebook to be executed and any necessary parameters or dependencies. Once the new task is created, designate it as a dependency of the original task in the Job configuration. This ensures that the new task is executed before the original task.

NEW QUESTION 90
Which of the following is stored in the Databricks customer's cloud account?

A. Databricks web application
B. Cluster management metadata
C. Repos
D. Data
E. Notebooks

Answer: D

NEW QUESTION 94
Which of the following describes a benefit of creating an external table from Parquet rather than CSV when using a CREATE TABLE AS SELECT statement?

A. Parquet files can be partitioned
B. CREATE TABLE AS SELECT statements cannot be used on files
C. Parquet files have a well-defined schema
D. Parquet files have the ability to be optimized
E. Parquet files will become Delta tables

Answer: C

Explanation:
https://www.databricks.com/glossary/what-is- parquet#:~:text=Columnar%20storage%20like%20Apache%20Parquet,compared%20to%2
0row%2Doriented%20databases. Columnar storage like Apache Parquet is designed to bring efficiency compared to row-based files like CSV. When querying, columnar storage you can skip over the non-relevant data very quickly. As a result, aggregation queries are less time-consuming compared to row-oriented databases.

NEW QUESTION 99
In which of the following file formats is data from Delta Lake tables primarily stored?

A. Delta
B. CSV
C. Parquet
D. JSON
E. A proprietary, optimized format specific to Databricks

Answer: C

Explanation:
https://docs.delta.io/latest/delta-faq.html

NEW QUESTION 103
A data engineer has joined an existing project and they see the following query in the project repository:
CREATE STREAMING LIVE TABLE loyal_customers AS SELECT customer_id -
FROM STREAM(LIVE.customers) WHERE loyalty_level = 'high';
Which of the following describes why the STREAM function is included in the query?

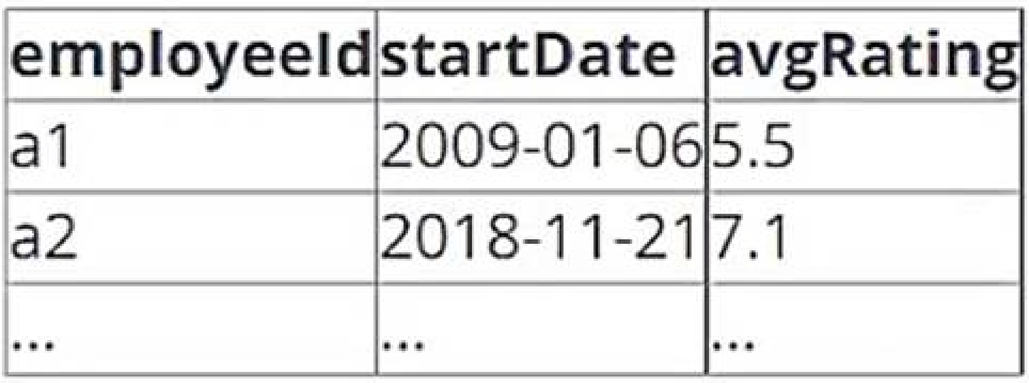
A. The STREAM function is not needed and will cause an error.
B. The table being created is a live table.
C. The customers table is a streaming live table.
D. The customers table is a reference to a Structured Streaming query on a PySpark DataFrame.
E. The data in the customers table has been updated since its last run.

Answer: C

Explanation:
https://docs.databricks.com/en/sql/load-data-streaming-table.html Load data into a streaming table

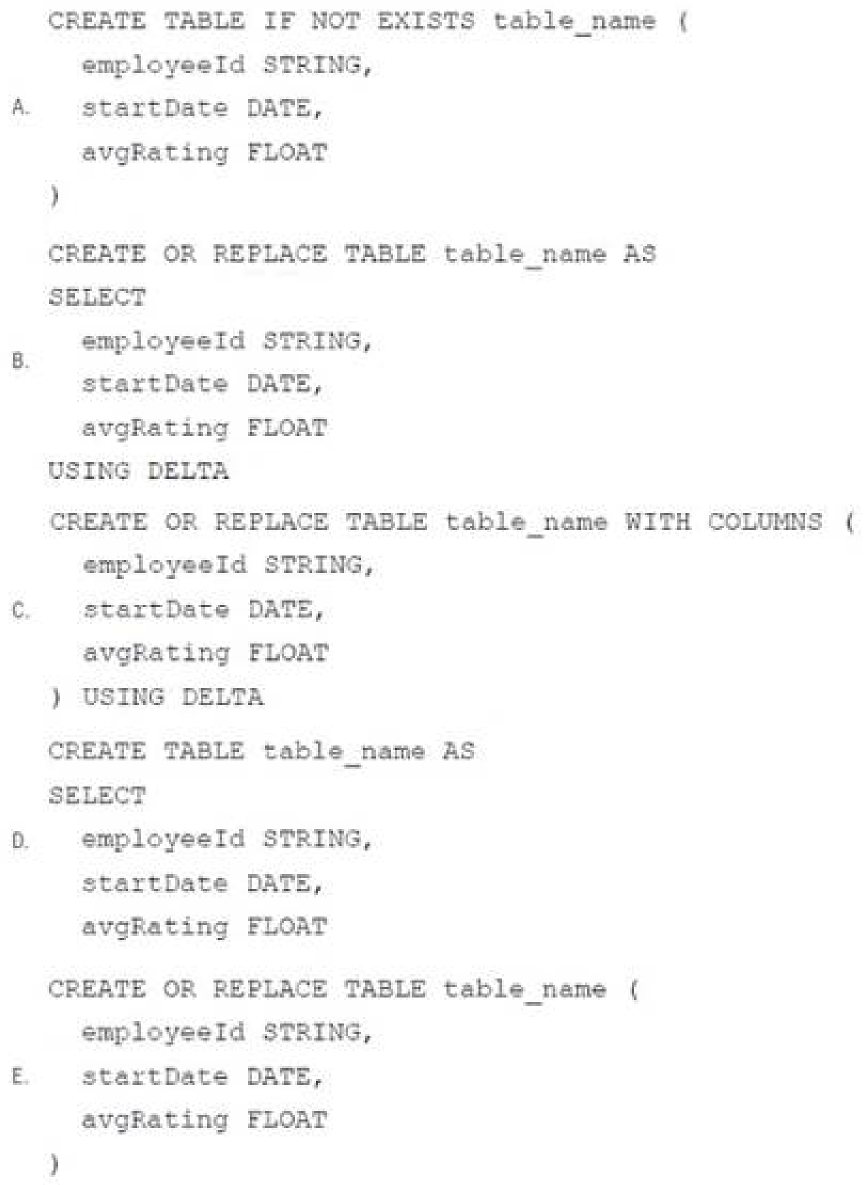
To create a streaming table from data in cloud object storage, paste the following into the query editor, and then click Run:
SQL
Copy to clipboardCopy
/* Load data from a volume */
CREATE OR REFRESH STREAMING TABLE <table-name> AS SELECT * FROM STREAM
read_files('/Volumes/<catalog>/<schema>/<volume>/<path>/<folder>')
/* Load data from an external location */
CREATE OR REFRESH STREAMING TABLE <table-name> AS
SELECT * FROM STREAM read_files('s3://<bucket>/<path>/<folder>')

NEW QUESTION 108
A data architect has determined that a table of the following format is necessary:



employeeId	startDate	avgRating
a1	2009-01-06	5.5
a2	2018-11-21	7.1
...	...	...

Which of the following code blocks uses SQL DDL commands to create an empty Delta table in the above format regardless of whether a table already exists with this name?

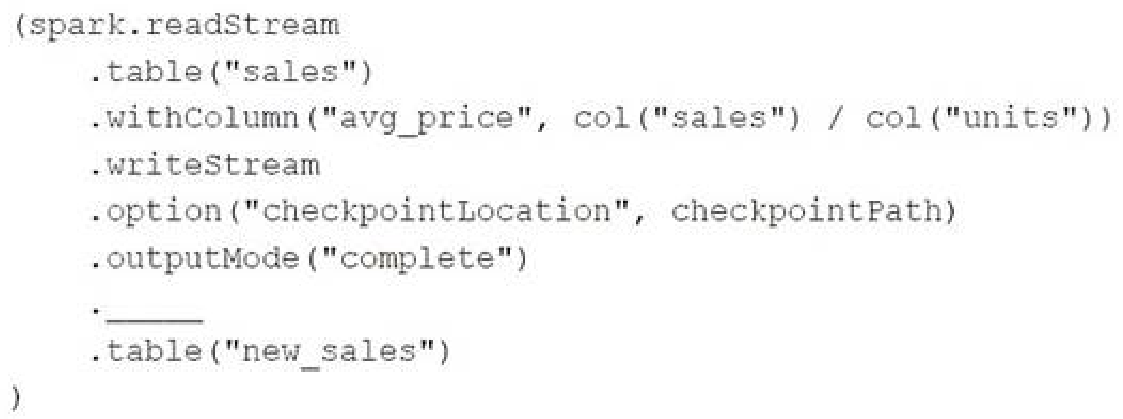


```
   CREATE TABLE IF NOT EXISTS table_name (
     employeeId STRING,
A.   startDate DATE,
     avgRating FLOAT
   )

   CREATE OR REPLACE TABLE table_name AS
   SELECT
     employeeId STRING,
B.   startDate DATE,
     avgRating FLOAT
   USING DELTA

   CREATE OR REPLACE TABLE table_name WITH COLUMNS (
     employeeId STRING,
C.   startDate DATE,
     avgRating FLOAT
   ) USING DELTA

   CREATE TABLE table_name AS
   SELECT
D.   employeeId STRING,
     startDate DATE,
     avgRating FLOAT

   CREATE OR REPLACE TABLE table_name (
     employeeId STRING,
E.   startDate DATE,
     avgRating FLOAT
   )
```

A. Option A
B. Option B
C. Option C
D. Option D
E. Option E

Answer: E

NEW QUESTION 111
A data engineer has configured a Structured Streaming job to read from a table, manipulate the data, and then perform a streaming write into a new table.
The code block used by the data engineer is below:



```
(spark.readStream
    .table("sales")
    .withColumn("avg_price", col("sales") / col("units"))
    .writeStream
    .option("checkpointLocation", checkpointPath)
    .outputMode("complete")
    ._____
    .table("new_sales")
)
```

If the data engineer only wants the query to process all of the available data in as many batches as required, which of the following lines of code should the data engineer use to fill in the blank?

A. processingTime(1)
B. trigger(availableNow=True)
C. trigger(parallelBatch=True)
D. trigger(processingTime="once")
E. trigger(continuous="once")

Answer: B

Explanation:
https://stackoverflow.com/questions/71061809/trigger-availablenow-for-delta- source-streaming-queries-in-pyspark-databricks

NEW QUESTION 114
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