

Practice Exam 3 - Results

Question 1 **Correct**

Which of the following statement correctly describes Snowflake architecture?

Shared nothing architecture

Shared disk architecture

Your answer is correct

Multi-cluster Shared Data architecture

Overall explanation

Snowflake implements a new hybrid architecture that combines the best features of shared-disk and shared-nothing architectures. Snowflake stores data similarly to a shared-disk architecture, i.e., the data is shared. But it also allows for using several compute engines, each with its own memory and processing capabilities.

<https://docs.snowflake.com/en/user-guide/intro-key-concepts#snowflake-architecture>

Domain

Architecture

Question 2 **Correct**

What are the implications if the number of concurrent users on a virtual warehouse is increased?

Improved performance for all queries

Improved performance for large, complex queries

Your answer is correct

Decreased performance for large, complex queries

Improved performance for small, point lookup queries

Overall explanation

Concurrent queries share warehouse resources; thus, a high number of concurrent queries means each query gets fewer resources and will likely perform worse.

<https://docs.snowflake.com/en/user-guide/performance-query-warehouse-max-concurrency>

Domain

Performance Concepts

Question 3 **Correct**

What is the minimum required role to create a trial account through Partner Connect?

ORGADMIN

SYSADMIN

Your answer is correct

ACCOUNTADMIN

PUBLIC

SECURITYADMIN

Overall explanation

Only users with the ACCOUNTADMIN role and a verified email address in Snowflake can access Partner Connect.

<https://docs.snowflake.com/en/user-guide/ecosystem-partner-connect#connecting-with-a-snowflake-partner>

Domain

Partners

Question 4Correct

Which of the following correctly describes the behaviour when a Transient table is attempted to be cloned?

Select two answers.

Transient tables can be cloned to permanent tables.

Your selection is correct

Transient tables can be cloned to transient tables.

Your selection is correct

Transient tables can be cloned to temporary tables.

Transient tables can be cloned to external tables.

Overall explanation

Transient tables can NOT be cloned to a permanent table.

Doing so will typically show the following error “Transient object cannot be cloned to a permanent object.”

However, a transient table may be cloned to a transient table or another temporary table.

Domain

Cloning

Question 5Correct

True or False: When a file has been loaded into a table, Snowflake marks that file as loaded in the metadata so that the file does not get processed again.

Your answer is correct

True

False

Overall explanation

The load metadata stores a variety of information, such as the name of every file that was loaded into that table and the time stamp corresponding to the time that a file was loaded. By utilizing this load metadata, Snowflake ensures that it will not reprocess a previously loaded file. The load metadata expires after 64 days. Snowflake skips over any older files for which the load status is undetermined.

<https://docs.snowflake.com/en/user-guide/data-load-considerations-load#load-metadata>

Domain

Data Loading and Unloading

Question 6 **Correct**

Which of the following actions can NOT be performed by a consumer account on a shared database?

Your selection is correct

Use Time Travel on shared tables.

Your selection is correct

Clone the shared database.

Your selection is correct

Clone a table from the shared database.

Your selection is correct

Modify data in a shared table.

Join data from a shared table with another table.

Query data in a shared table.

Overall explanation

Consumer accounts can only access and query data but cannot add, modify, or create database objects to a shared database.

Consumer accounts cannot clone a shared database, its schemas, or any of its tables.

Consumer accounts cannot use Time Travel on the shared data.

Consumer accounts cannot further share a shared database.

<https://docs.snowflake.com/en/user-guide/data-share-consumers#general-limitations-for-shared-databases>

Domain

Data Sharing

Question 7 **Correct**

Which of the following statements are true regarding the storage hierarchy in Snowflake?

Select all that apply.

Your selection is correct

Tables are stored within Schemas.

Your selection is correct

Schemas are stored within Databases.

Your selection is correct

Databases are stored within Accounts.

Virtual Warehouses are stored in Databases.

Databases are stored in Virtual Warehouses.

Overall explanation

In Snowflake, the highest level is a Snowflake Account. Customers can have as many accounts as they like. Within an account, you have databases. Each database contains one or more schemas. Schemas contain other Objects. Tables, views, file formats, sequences, UDFs, and stored procedures are all examples of objects available in a schema. An object can be contained in only one schema.

Domain

Snowflake's catalog and objects

Question 8Correct

Under which condition a stored procedure will execute under the privileges of the role that created the stored procedure?

The stored procedure has been configured to run under the caller's rights.

Your answer is correct

The stored procedure has been configured to run under the owner's rights.

The stored procedure performs account-level modifications.

The stored procedure changes the system security settings.

Overall explanation

A stored procedure can be called with either the caller's rights or the owner's rights. A stored procedure configured to run with callers' rights executes under the permissions of the calling user. A stored procedure configured to run with the owner's rights executes under the privileges of the role that created and owns the stored procedure.

<https://docs.snowflake.com/en/sql-reference/stored-procedures-rights>

Domain

Extending Snowflake Functionality

Question 9Correct

You are the solution architect for a large retail company running a Snowflake data warehouse. Your Snowflake implementation has just gone live with a single virtual warehouse used by users across the organization. One of your heaviest users is the Finance department, which has a large number of users and executes a large number of queries. The finance department has complained that the queries take a long time to execute. What is the best immediate action you should take to improve their experience?

Limit the number of queries that the finance department can execute.

Your answer is correct

Introduce a dedicated virtual warehouse instance for the finance department and size it according to their needs. Set the new virtual warehouse to auto-suspend and auto-resume.

Increase the size of your single virtual warehouse to the maximum size available so that queries for all users (not just finance) execute faster.

Overall explanation

By using dedicated virtual warehouses, you can isolate the workload for a specific user group. In this case, dedicating a virtual warehouse for the finance users will ensure that they get maximum and dedicated performance.

Domain

Performance Concepts

Question 10Correct

Which of the following caches are stored in the cloud services layer? Select all that apply.

Web Cache

Your selection is correct

Metadata Cache

JDBC Cache

Your selection is correct

Query Result Cache

Virtual Warehouse Cache

Overall explanation

The cloud services layer stores the Query Result Cache and Metadata Cache. The virtual warehouse cache is stored locally in a virtual warehouse.

<https://docs.snowflake.com/en/user-guide/querying-persisted-results>

Domain

Architecture

Question 11Correct

You are the Data warehouse administrator at a large bank running the Enterprise edition of Snowflake as their data warehouse solution. You have noticed that every month's end, the number of queries executed on Snowflake by the finance department increases many times.

Although the finance department has a large (L) virtual warehouse, user queries must wait (queue) while the previous queries complete.

What is the best course of action to improve the user experience during month-ends while minimizing costs?

Increase the size of the virtual warehouse dedicated to finance from L to XL during the month-end processing. This increase will double the processing power of the virtual warehouse and will result in queries finishing faster.

In addition, reduce the size of the virtual warehouse after the month-end period is complete.

Your answer is correct

Configure the finance virtual warehouse to be a multi-clustered virtual warehouse. The multi-cluster virtual warehouse will auto-spawn (and auto shutdown) additional virtual warehouses as the demand increases and decreases. Disable finance users during the month-end processing so that the load on the system decreases.

Permanently increase the size of the virtual warehouse dedicated to finance to XL. This will ensure increased performance throughout the month and not just at the month-end.

Overall explanation

Multi-cluster virtual warehouses are frequently used in scenarios where the number of concurrent queries exceeds the capacity of a single virtual warehouse. When a virtual warehouse's concurrent workload exceeds its maximum capacity, additional queries are placed in the queue. Multi-cluster virtual warehouses dynamically add additional clusters based on demand to solve the queueing issue. When demand decreases, the additional clusters are decommissioned. This process is also known as scaling out or auto-scaling. <https://docs.snowflake.com/en/user-guide/warehouses-multicuster>

Domain

Performance Concepts

Question 12Correct

Snowflake performs encryption in transit using TLS 1.2. Snowflake can do encryption in transit for which of the following tools? Select all that apply.

Your selection is correct

JDBC Connector

Your selection is correct

Snowflake Web UI

Your selection is correct

SnowSQL

Your selection is correct

ODBC Connector

Overall explanation

Snowflake encrypts all data in transit using Transport Layer Security (TLS) 1.2. This applies to all Snowflake connections, including those made through the Snowflake Web interface, JDBC, ODBC, and the Python connector. <https://docs.snowflake.com/en/user-guide/security-encryption-end-to-end>

Domain

Security

Question 13Correct

Which of the following are true regarding External tables?

Your selection is correct

An external table and a standard Snowflake table can be joined

An external table points to an internal stage

Your selection is correct

Queries can be run on an external table just like any other table

An external table and a standard Snowflake table can NOT be joined

Overall explanation

Snowflake provides external tables that enable the creation of tables with data stored in external cloud storage. The definition and metadata of an external table contain information on file locations, filenames, and other attributes. The definition also includes the external stage from which the data for an external table will come. External tables allow you to query an external table in the same manner as a typical table. External tables may be joined to other tables, and views can be created on external tables. <https://docs.snowflake.com/en/user-guide/tables-external-intro>

Domain

Data Loading and Unloading

Question 14Correct

True/False: Snowflake automatically determines the most efficient algorithm to compress columns in a micro-partition.

False

Your answer is correct

True

Overall explanation

Snowflake stores columns in a columnar manner within each micro-partition. A columnar format enables Snowflake to optimize queries by retrieving only the referenced columns. In addition to micro-partition compression, each column in a micro-partition is compressed independently. Snowflake chooses the optimum compression algorithm for each column. <https://docs.snowflake.com/en/user-guide/tables-clustering-micropartitions.html>

Domain

Architecture

Question 15Correct

Which of the following statements are true regarding URL expiry?

Select all that apply.

Your selection is correct

Scoped URLs expire after 24 hours.

Scoped URLs don't expire.

Your selection is correct

File URLs never expire.

File URLs expire after 24 hours.

Overall explanation

A file URL is a permanent Snowflake-hosted URL to a staged file. File URLs don't expire.

A scoped URL is a temporary and encoded URL that allows temporary access to a staged file without requiring any privileges on the stage. A scoped URL expires after 24 hours.

A pre-signed URL is a simple HTTPS URL for accessing a file using a web browser. The expiry duration of a pre-signed URL is configurable and can be set to the required duration.

<https://docs.snowflake.com/en/user-guide/unstructured-intro#types-of-urls-available-to-access-files>

Domain

Data Transformation

Question 16Correct

In Snowflake, which of the following types of URLs can be used to access unstructured data?

Select all that apply.

Your selection is correct

File URL

Samba URL

Your selection is correct

Scoped URL

Network Share Path

Your selection is correct

Pre-signed URL

Overall explanation

The three types of URLs that can be used to access unstructured data in cloud storage are Scoped URLs, File URLs, and Pre-signed URLs

<https://docs.snowflake.com/en/user-guide/unstructured-intro#types-of-urls-available-to-access-files>

Domain

Data Transformation

Question 17Correct

What type of partners are Matillion, Informatica, IBM DataStage, Talend, and AbInitio within the Snowflake partner ecosystem?

Business Intelligence

Machine Learning & Data Science

Security, Governance & Observability

Your answer is correct

Data Integration

Overall explanation

All of these are Data Integration partners of Snowflake. Please see <https://docs.Snowflake.com/en/user-guide/ecosystem.html>

Domain

Partners

Question 18Correct

What is the maximum period for which Time Travel is permitted for Transient tables?

14 days

21 days

7 days

Your answer is correct

1 day

Overall explanation

Transient and Temporary tables in Snowflake support Time Travel for up to 1 day, irrespective of the Snowflake edition used. <https://docs.snowflake.com/en/user-guide/tables-temp-transient>

Domain

Time Travel

Question 19Correct

Under which circumstances will the query result cache fulfill the query result?

Select all that apply

The query is executed by the same user who generated the result cache for a previous query.

Your selection is correct

The role executing the query has the necessary privileges on the tables used in the query.

Your selection is correct

The micro-partitions for the tables in the query have not changed.

New micro-partitions have been added to one of the tables used in the query.

Your selection is correct

The query matches a previously executed query for which cached results are still available.

Overall explanation

The underlying data and micro-partitions must not change, and the query should be syntactically identical for the query result cache to be used. The cache must have been generated (or last used) less than 24 hours ago.

<https://docs.snowflake.com/en/user-guide/querying-persisted-results>

Domain

Performance Concepts

Question 20**Correct**

Which of the following statements best describes Snowsight?

A mobile app to connect to your Snowflake instance.

A lightweight desktop application with a user interface to administer your Snowflake instance.

A command-line interface to connect to your Snowflake instance.

Your answer is correct

A web-based interface to connect to your Snowflake instance.

Overall explanation

Snowsight is a modern and lightweight web interface using new technologies and is a primary method of interacting with your Snowflake instance.

<https://docs.snowflake.com/en/user-guide/ui-snowsight>

Domain

Tools & Interfaces

Question 21**Correct**

The COPY command allows the following options for selecting files for loading data from a stage. Select all that apply.

Your selection is correct

Load files that match a pattern.

Your selection is correct

Load specific files by providing exact file names.

Your selection is correct

Load all files in a specific path.

Overall explanation

All of these options are correct. You can load by providing exact file names, load all files from a specific path, or load files that match a pattern.

<https://docs.snowflake.com/en/user-guide/data-load-considerations-load#options-for-selecting-staged-data-files>

Domain

Data Loading and Unloading

Question 22**Correct**

Which of the following allows users to control how the data for a table is organized in micro-partitions?

Partition Pruning

Materialized Views

Your answer is correct

Automatic Clustering

Search Optimization

Overall explanation

For tables with a clustering key defined, Automatic Clustering, a Snowflake service, manages the re-clustering as needed, distributing data according to the clustering key. Snowflake internally maintains the clustered tables and any resource requirements with Automatic Clustering. Automatic Clustering only adjusts those micro-partitions that benefit from the re-clustering process.

<https://docs.snowflake.com/en/user-guide/tables-auto-reclustering>

Domain

Performance Concepts

Question 23**Incorrect**

Which of the following is true regarding stored procedures?

Your selection is correct

A newly created stored procedure defaults to run under the owner's privileges.

Correct selection

A stored procedure can be altered to configure if it runs under owner's rights or caller's rights.

A newly created stored procedure defaults to run under the caller's privileges.

Your selection is incorrect

Once created, a stored procedure can not be altered to configure if it runs under owner's rights or caller's rights.

Overall explanation

You can specify if a stored procedure runs under the caller's or owner's rights when creating the stored procedure. It defaults to the owner's right if nothing is specified. It is possible to change this configuration later by altering the stored procedure.

<https://docs.snowflake.com/en/sql-reference/stored-procedures-rights>

Domain

Extending Snowflake Functionality

Question 24**Correct**

Which of the following is true regarding Time Travel in Snowflake?

Undrop allows users to recover dropped accounts and roles.

Undrop enables Snowflake to keep a stable client connection open even with a bad network link.

Your answer is correct

Undrop allows users to restore dropped tables, schemas, and databases.

The undrop feature allows Snowflake to reconstruct data packets dropped during communication.

Overall explanation

Undrop allows users to restore dropped tables, schemas, and databases. When tables, schemas, or databases are dropped in Snowflake, they are not immediately removed from the system and are still recoverable during Time Travel. When a table is dropped, the data is retained on the cloud storage, even though the table is listed as dropped. Snowflake merely sets the table's state to non-deleted to undrop it. Therefore, undrop

can be applied to tables, schemas, and databases. <https://docs.snowflake.com/en/user-guide/data-time-travel#restoring-objects>

Domain

Time Travel

Question 25Correct

Which statements correctly describe the contents of a Snowflake share object? Select all that apply.

Your selection is correct

A share object contains privileges that grant access to a database & a schema from which objects are being shared.

Your selection is correct

A share object contains the consumer account(s) with which the database & the objects are to be shared.

A share object contains the virtual warehouse that will be used to execute queries on the shared objects.

Your selection is correct

A share object contains privileges that grant access to the shared objects, i.e., tables, secure views, etc., that are being shared.

Overall explanation

A share acts as a container for objects that need to be shared and specifies the consumer accounts. A share contains USAGE privileges on the database & the schema to be shared, privileges on the tables, secure views which will be shared, and the consumer account(s) to which the Share will be available. A virtual warehouse is not part of a share. If a Snowflake customer consumes a share, they will use their own virtual warehouse. If a non-Snowflake customer is consuming the Share, they will use the data provider compute through a data provider-created virtual warehouse (which would have been separately configured)

Domain

Data Sharing

Question 26Correct

The Database Storage layer in Snowflake architecture can be on which of the following? Select all that apply.

Hybrid Cloud

On-Premise NAS

Your selection is correct

Azure Blob Storage

Your selection is correct

AWS S3

Your selection is correct

Google Cloud Storage

Overall explanation

Snowflake's shared storage layer resides on low-cost object cloud storage. Snowflake currently supports AWS S3 storage, Azure Blob Storage, and Google Cloud Storage for data storage.

Domain

Architecture

Question 27Correct

After a virtual warehouse has been suspended by a resource monitor, which of the following will allow the virtual warehouse to be resumed?

Select all that apply.

An account administrator resumes the virtual warehouse.
The virtual warehouse is resumed using SnowSQL.

Your selection is correct

The monitor's credit quota is increased.

Your selection is correct

The credit threshold for the suspend action is increased.

Your selection is correct

The next interval for the resource monitor starts.

Overall explanation

If a monitor has a Suspend or Suspend Immediately action, and its used credits hit the threshold for the action, any warehouses assigned to the monitor are put on hold and can't be used again until one of the following happens:

- The next interval starts as per the monitor configuration. A monitor credit limit is applicable within a defined time interval (days, months, etc.)
- The credit quota for the monitor is increased.
- The credit threshold needed to suspend is increased.
- The virtual warehouse is removed from the monitor configuration (does not apply to account-level monitors)
- The monitor is dropped altogether.

<https://docs.snowflake.com/en/user-guide/resource-monitors>

Domain

Account Usage & Monitoring

Question 28Correct

Which of the following correctly describes the behavior of a materialized view when new columns are added to the base table?

Select two answers.

You must resume the materialized view if you want to use it again.

The new columns are automatically propagated to the materialized view.

Your selection is correct

The materialized view is NOT suspended.

Your selection is correct

The new columns are NOT propagated to the materialized view automatically.

The materialized view is suspended.

Overall explanation

When new columns are added to a base table with a materialized view on top, the new columns are NOT propagated automatically to the materialized view. Even in a scenario where a SELECT * statement might be used in a materialized view; the new columns are NOT propagated because the columns of a materialized view are defined when the materialized view is defined.

Also, the materialized view is NOT suspended, so it can continue to be used.

<https://docs.snowflake.com/en/user-guide/views-materialized#adding-columns-to-the-base-table>

Domain

Performance Concepts

Question 29Correct

True/False: Credits used by a Medium virtual warehouse running for 2 hours is equal to 4 hours of Small virtual warehouse usage.

Your answer is correct

True

False

Overall explanation

Virtual warehouses' compute time is paid for using snowflake credits. The quantity of Snowflake credits used is determined by the size of the virtual warehouse and the length of time they are in a running state. When the size of a virtual warehouse is increased, the number of credits used in an hour also increases. An X-Small (1-node) virtual warehouse consumes 1 credit for an hour of use. Since the credit usage per hour doubles for each increase in size, a Small virtual warehouse (consisting of 2 nodes) running for 4 hours consumes 8 snowflake credits. Similarly, a Medium virtual warehouse consumes 8 snowflake credits within 2 hours because it consists of 4 nodes and is consuming credits at twice the rate of a Small virtual warehouse.

Domain

Architecture

Question 30Correct

Which of the following layer facilitates the cloning of tables?

Sharing Management Layer

Query Processing Layer

Your answer is correct

Cloud Services Layer

Cloning Management Layer

Overall explanation

Cloning is achieved through metadata operation performed in the cloud services layer. Data is not physically copied, nor are new micro-partitions created—instead, the cloned table points to the micro-partitions of the source table.

<https://docs.snowflake.com/en/user-guide/tables-storage-considerations#label-cloning-tables>

Domain

Cloning

Question 31Correct

Which of the following statements correctly describe Search Optimization in Snowflake? Select all that apply.

The search optimization service doesn't use a persistent data structure.

Your selection is correct

The search optimization configuration on a table and its maintenance service are transparent to the users.

Your selection is correct

The search optimization service uses a persistent data structure

Overall explanation

The search optimization service can significantly enhance the performance of some lookup and analytical queries that use many predicates for filtering. The search optimization service uses a persistent data structure as an optimized search access path to speed up point lookups. When the data in the table is changed (for example, by loading new data sets or performing their DML operations), the maintenance service updates the search access path to reflect the changes. The search optimization configuration on a table and the maintenance service are transparent to the users.

<https://docs.snowflake.com/en/user-guide/search-optimization-service>

Domain

Performance Concepts

Question 32Correct

Which of the following statement is true when sharing data with an organization that does not have a Snowflake account?

An account inheritance hierarchy must be created to share data with a non-Snowflake customer.

A child account must be created for sharing data with a non-Snowflake customer

Your answer is correct

A reader account must be created for sharing data with a non-Snowflake

Overall explanation

Sharing with a non-Snowflake user requires the creation of a reader account. The reader account provides the non-Snowflake user with a Snowflake account through which they can consume the shared data. The data providers own the reader account, and all costs (including query costs) are charged to the data provider.

<https://docs.snowflake.com/en/user-guide/data-sharing-reader-create>

Domain

Data Sharing

Question 33Correct

True or False: Data in Time Travel and fail-safe storage is stored free of charge by Snowflake.

True

Your answer is correct

False

Overall explanation

Snowflake charges for Time Travel and failsafe data storage. The cost of maintaining data for Time Travel and fail-safe is calculated every 24 hours based on the number of days it is maintained and the time since it was last modified.

<https://docs.snowflake.com/en/user-guide/data-cdp-storage-costs>

Domain

Time Travel

Question 34Correct

What is the maximum period for a query result cache to be retained?

24 hours

Your answer is correct

31 days

Overall explanation

The query result cache for a query has an initial validity period of twenty-four hours. The cache is purged if a new query doesn't reuse the previously generated cache within 24 hours. If a new query uses the result cache, the validity period for the query result cache is reset to another 24 hours. It is now valid for another 24 hours from when it was reused. This extension of the first query result cache can continue for up to a maximum of 31 days from the point in time when a query result cache was initially produced.

After 31 days, the query result cache for a query is purged altogether.

<https://docs.snowflake.com/en/user-guide/querying-persisted-results>

Domain

Performance Concepts

Question 35Correct

You execute a time travel query on a table but get the following error. "Time travel data is not available for the table. The requested time is either beyond the allowed time travel period or before the object creation time." What could this error indicate? Select all that apply.

Your selection is correct

You have provided a query id for STATEMENT in the BEFORE clause that is outside of that table's Time Travel retention period.

Your role is not authorized to use Time Travel.

Your selection is correct

You have provided a value for OFFSET in the AT clause that is outside of the Time Travel retention period of that table.

Your selection is correct

You have provided a value for TIMESTAMP in the BEFORE clause that is outside of that table's Time Travel retention period.

The table is being loaded; therefore, Time Travel is unavailable.

Overall explanation

A time travel query will fail, and an error will be returned if the TIMESTAMP, OFFSET, or STATEMENT supplied in the AT | BEFORE clause is outside of the Time Travel retention period for the table. The same error is thrown if the time travel query

attempts to access the table data before it was created.

<https://docs.snowflake.com/en/user-guide/data-time-travel#querying-historical-data>

Domain

Time Travel

Question 36Correct

External tables are a good solution for which of the following is true? Select all that apply.

Your selection is correct

The data is not accessed frequently.

Data is in binary format and can not be loaded into Snowflake.

Your selection is correct

Typically only a subset of data is accessed.

Your selection is correct

Data is already in a data lake on a cloud platform (e.g., S3, Azure Blob Storage)

Overall explanation

Organizations with established data lakes and significant amounts of data in cloud object storage will find external tables helpful. When data is accessed infrequently, or only a portion of the data has to be queried, external tables can expose data from data lakes in a cost-effective manner. However, storing the data in a typical Snowflake table may be more economical if all of the data is viewed or if access is made often.

<https://docs.snowflake.com/en/user-guide/tables-external-intro>

Domain

Data Loading and Unloading

Question 37Correct

True or False: If a database or a schema is cloned, the child object privileges are automatically copied.

Your answer is correct

True

False

Overall explanation

A cloned object does not inherit any privileges from its source object; for instance, a cloned table does not inherit any privileges from its source table. However, if a database or schema is cloned, privileges are inherited by the child objects.

<https://docs.snowflake.com/en/user-guide/object-clone#access-control-privileges-for-cloned-objects>

Domain

Cloning

Question 38Correct

Snowflake stores data in fail-safe storage for Transient tables for how long?

Your answer is correct

0 days

7 days

1 day

14 days

Overall explanation

Snowflake has transient and temporary tables that don't provide fail-safe capabilities; hence, data in such tables have 0 days of fail-safe storage.

<https://docs.snowflake.com/en/user-guide/tables-temp-transient>

Domain

Fail-safe

Question 39Correct

Which of the following terms may be used to describe Snowflake?

Select all that apply.

Your selection is correct

Built from scratch, specifically designed for execution on cloud platforms.

Shared Disk

Your selection is correct

Shared Data

Shared Compute

Your selection is correct

Hybrid Columnar Storage

Your selection is correct

Native SQL support

Overall explanation

Snowflake has been designed for the cloud and has been designed from scratch.

Snowflake stores data similarly to a shared-disk architecture, i.e., the data is shared (disk isn't shared). It also allows for the use of several compute engines.

It provides Native SQL support and stores data in a hybrid columnar format.

Domain

Architecture

Question 40Correct

True or False. The variant data type can hold up to 16MB of data per row.

False

Your answer is correct

True

Overall explanation

A single row of a VARIANT column can hold up to 16MB of data. If your JSON is larger than that, you will need to think of alternate techniques, such as splitting the JSON into multiple rows. <https://docs.snowflake.com/en/sql-reference/data-types-semistructured#variant> <https://docs.snowflake.com/en/user-guide/semistructured-intro#loading-semi-structured-data>

Domain

Data Loading and Unloading

Question 41Correct

Which of the following statements correctly describes fail-safe in Snowflake? Select all that apply.

Your selection is correct

The fail-safe protection is in addition to the protection provided by Time Travel.

Your selection is correct

Failsafe ensures that historical data is protected in the event of a catastrophic failure.

Your selection is correct

Failsafe provides up to 7 days of historical data protection for permanent tables.

Failsafe provides up to 90 days of historical data protection for permanent tables.

Failsafe is the same as Time Travel.

Overall explanation

In addition to protection provided by Time Travel, data that has been modified also goes through a failsafe period. Failsafe storage is intended to provide an extra layer of protection against data loss caused by human error. Once the Time Travel period ends, Snowflake keeps the data for a further 7-day period as further protection. When data is in failsafe storage, ordinary users cannot access it; only Snowflake support employees can access and recover it if the customer requests it.

<https://docs.snowflake.com/en/user-guide/data-failsafe>

Domain

Fail-safe

Question 42Correct

A virtual warehouse is in a suspended state. Can it be resized?

No

Your answer is correct

Yes

Overall explanation

You can resize a virtual warehouse at any time, even when they are running. When a virtual warehouse is resized, Snowflake adds or removes nodes according to the new size. The removal of nodes takes place only when all active queries on those nodes have finished. <https://docs.snowflake.com/en/user-guide/warehouses-tasks#resizing-a-warehouse>

Domain

Architecture

Question 43Correct

Cloning does not contribute towards the overall storage unless which of the following conditions are met?

The cloned object is too big.

Your selection is correct

Data is changed in the source table.

The CREATE_COPY parameter is set to true while cloning data.

Your selection is correct

Data is changed in the cloned table.

Overall explanation

When tables, schemas, or databases are cloned, the cloning operation does not contribute to total storage until data manipulation language (DML) operations are performed on the source or target, which modify or delete existing data or add additional data. <https://docs.snowflake.com/en/user-guide/tables-storage-considerations#label-cloning-tables>

Domain

Cloning

Question 44Correct

What S3 permissions are required when unloading data from Snowflake to an AWS S3 location?

Select two answers.

Your selection is correct

s3:DeleteObject

s3:GetObject

Your selection is correct

s3:PutObject

s3:ListBucket

Overall explanation

Snowflake requires s3:DeleteObject & s3:PutObject permissions on the target S3 bucket.

<https://docs.snowflake.com/en/user-guide/data-unload-s3#configuring-an-s3-bucket-for-unloading-data>

Domain

Data Loading and Unloading

Question 45 **Correct**

Consider a database with the name **MARKETING**. The database has a table called **CUSTOMER** in the **PUBLIC** schema. The table has *10,000* rows.

You create a temporary table with the same name, i.e., **CUSTOMER**, in the **PUBLIC** schema of the **MARKETING** database. This temporary table has *no* data.

Which of the following statements correctly describes the behavior for **SELECT** queries (in the same session) accessing the **CUSTOMER** table?

Your answer is correct

Executing "SELECT * FROM **MARKETING.PUBLIC.CUSTOMER**;" query returns zero rows.

Executing "SELECT * FROM **MARKETING.PUBLIC.CUSTOMER**;" query returns 10,000 rows.

Executing "SELECT * FROM **MARKETING.PUBLIC.CUSTOMER**;" query fails with a duplicate error.

Executing "SELECT * FROM **MARKETING.PUBLIC.CUSTOMER**;" query fails with an unknown object error.

Overall explanation

Like permanent and transient tables, temporary tables belong to a database & schema. However, because they are limited to a session, the naming uniqueness constraints do not apply to them. Therefore, creating a temporary table with the same name as an existing table is possible. This can result in some potential conflicts and unexpected behavior.

If a temporary table is created in a schema with the same name as a permanent (or transient) table, the temporary table effectively hides the permanent table in that session. Queries and other operations during the session will affect only the temporary table.

<https://docs.snowflake.com/en/user-guide/tables-temp-transient#potential-naming-conflicts-with-other-table-types>

Domain

Snowflake's catalog and objects

Question 46Correct

Which of the following contributes toward the costs of a Snowflake system?

Number of tables

Your selection is correct

The amount of storage used.

Number of Users

Your selection is correct

Active virtual warehouses.

Overall explanation

Virtual warehouses in a resumed (active) state contribute to the costs. However, it does not matter if the virtual warehouse is not running a query; if it is resumed, it contributes to the costs.

<https://docs.snowflake.com/en/user-guide/cost-understanding-compute>

Snowflake charges for data storage in database tables, files staged in internal stages, time travel history, and fail-safe storage.

<https://docs.snowflake.com/en/user-guide/cost-understanding-data-storage>

Domain

Cost & Pricing

Question 47Correct

Which statements are true regarding costs when a Snowflake account shares data with another Snowflake account? Select all that apply.

Both the data provider and the data consumer are charged for the storage costs.

Your selection is correct

The data consumer is NOT charged for any storage costs associated with the shared data.

Your selection is correct

The data consumer is charged for the compute charges for queries they run.

The data provider is charged for the compute charges for queries the data consumer runs.

Overall explanation

Since the provider account stores and pays for the data storage, the data consumer doesn't have to pay anything extra for storage. However, the data consumer pays for the compute used to run queries on shared data. When queries are run on shared data, the compute of the data consumer is used

Domain

Data Sharing

Question 48Correct

Which of the following terms refers to the same layer in Snowflake architecture?

Select all that apply.

Cloud Layer

Your selection is correct

Query Processing Layer

Your selection is correct

Virtual Warehouses

Your selection is correct

Compute Layer

Storage Layer

Overall explanation

Query Processing Layer, Virtual Warehouses, Compute Layer, Compute Nodes, and Compute Clusters may be interchangeably used to refer to "a layer providing query processing capability."

<https://docs.snowflake.com/en/user-guide/intro-key-concepts#query-processing>

Domain

Architecture

Question 49Correct

Which command can be used to download data from an internal stage to an on-premises system?

VALIDATE

PUT

COPY

Your answer is correct

GET

Overall explanation

The GET command is used to download data from an internal stage to an on-premises system. The PUT command uploads data from an on-premises system to an internal stage. To download or upload data to an external stage, cloud provider utilities or other tools are used to interact with data in the cloud storage pointed to by the external stage. <https://docs.snowflake.com/en/user-guide/data-unload-overview#bulk-unloading-process>

Domain

Data Loading and Unloading

Question 50Correct

A multi-clustered virtual warehouse is configured in Auto Scaling mode. Which of the following Scaling Policies does it support? Select two options.

Your selection is correct

Standard

Fast

Your selection is correct

Economy

Efficient

Overall explanation

With the scaling policy set to Standard, Snowflake prefers to spin up extra virtual warehouses almost as soon as it detects that queries are starting to queue up. The Standard scaling policy aims to prevent or minimize queuing. The Economy scaling policy attempts to conserve credits over performance and user experience. It doesn't spin up more virtual warehouses as soon as queuing is observed but instead applies additional criteria to ascertain whether or not to spin up new virtual warehouses. The scaling policies are applied only when a virtual warehouse is running in the auto-scale mode because all clusters are automatically started anyway in a maximized manner, and a scaling policy does not have much use. <https://docs.snowflake.com/en/user-guide/warehouses-multicloud#setting-the-scaling-policy-for-a-multi-cluster-warehouse>

Domain

Performance Concepts

Question 51Correct

True or False: The COPY command exports to a single file by default.

Your answer is correct

False

True

Overall explanation

The unloading process automatically exports to multiple files so that it can take advantage of the parallelism offered by Snowflake. However, if needed, you can set the SINGLE parameter to true to ensure the export goes to a single file. The default size of each output file is 16 MB but can be changed using the MAX_FILE_SIZE parameter. The maximum allowed size per file is 5GB if you export data to cloud storage. <https://docs.snowflake.com/en/user-guide/data-unload-considerations#unloading-to-a-single-file>

Domain

Data Loading and Unloading

Question 52Correct

Each micro-partition generally contains _____ of uncompressed data.

Your answer is correct

50MB to 500MB

5MB to 10MB

1GB to 10GB

1024KB to 2048KB

Overall explanation

Micro-partitions are small and typically store 50 MB to 500 MB of uncompressed data. <https://docs.snowflake.com/en/user-guide/tables-clustering-micropartitions.html>

Domain

Architecture

Question 53Correct

True or False. The local disk cache is purged when a virtual warehouse is suspended.

False

Your answer is correct

True

Overall explanation

Every time a virtual warehouse accesses data from a table, it caches that data locally. This data cache can improve the performance of subsequent queries if those queries can reuse the data in the cache instead of reading from the table in the cloud storage. Reading from a local cache is a much more efficient operation than reading data from the cloud storage; therefore, it improves performance for queries that can take advantage of it. The warehouse cache is purged if the virtual warehouse is suspended. When the virtual house is resumed, the warehouse cache is rebuilt over time as queries are processed. <https://docs.snowflake.com/en/user-guide/warehouses-considerations#how-does-warehouse-caching-impact-queries>

Domain

Performance Concepts

Question 54Correct

True or False: When a clustering key is changed for a table, there may be a serverless cost associated with it.

Your answer is correct

True

False

Overall explanation

For tables with a clustering key defined, Automatic Clustering, a Snowflake service, re-clusters the micro-partitions as needed, distributing data according to the clustering key to achieve appropriate partition pruning. Snowflake internally maintains the clustered tables and any resource requirements with Automatic Clustering. Automatic Clustering only adjusts those micro-partitions which benefit from the re-clustering process. Automatic Clustering does not need a virtual warehouse but uses Snowflake-managed CPU, RAM, etc. Therefore, it has a cost attached, which should appear under serverless costs. Clustering a table uses credits like any other data modification (DML) action in Snowflake. Re-clustering also adds extra storage when data is physically redistributed and new micro-partitions are created. The original micro-partitions are kept for Time Travel and Fail-safe purposes, resulting in increased storage. <https://docs.snowflake.com/en/user-guide/tables-auto-reclustering#credit-usage-and-warehouses-for-automatic-clustering>

Domain

Performance Concepts

Question 55Incorrect

Which of the following statements are true regarding Snowflake virtual warehouse's high availability?

Select all that apply.

Your selection is correct

Snowflake will automatically replace failed compute instances within a virtual warehouse without causing disruptions.

Your selection is incorrect

Snowflake replicates virtual warehouses across three availability zones.

Your selection is correct

Snowflake can provision Virtual Warehouses in a different availability zone if required.

A failed virtual warehouse will result in corrupted data in tables.

Overall explanation

Snowflake automatically & transparently replaces failed compute instances within a virtual warehouse. This occurs without disruption to any queries.

The compute layer, i.e., the virtual warehouses, is not replicated. The virtual warehouses do not permanently store data and thus don't require replication.

Snowflake typically runs each virtual warehouse in a single availability zone. However, in case of an availability zone failure, Snowflake's cloud services layer can re-provision impacted warehouses in a different availability zone.

<https://developers.snowflake.com/wp-content/uploads/2021/06/Snowflake-High-Availability-for-Data-Apps-Whitepaper.pdf>

Domain

Architecture

Question 56Correct

To create an external UDF, what is the minimum Snowflake edition required?

Your answer is correct

Standard

Virtual Private Snowflake

Business Critical

Enterprise

Overall explanation

UDFs and external functions are foundational features supported by all Snowflake editions. <https://docs.snowflake.com/en/user-guide/intro-editions.html>

Domain

Licensing & Features

Question 57Incorrect

Which of the following operations can be fulfilled without needing an active virtual warehouse? Select all that apply.

Your selection is incorrect

Find the total of a numeric column

Your selection is correct

Find the maximum value of a numeric column

Find the average of a numeric column

Your selection is correct

Count the number of rows in a table

Overall explanation

Snowflake stores information about micro-partitions in the metadata. It stores the range of column values in its metadata, which includes the maximum and minimum values for each column in each micro-partition. Snowflake also stores the count of distinct values for each column in the metadata and certain other information to optimize a query. Because this information is stored in the metadata cache, Snowflake does not have to read the data from the tables for specific queries; instead, it may retrieve the information it needs directly from the metadata. These queries include things like count queries and queries containing functions like MIN or MAX. The metadata cache will not be used if you execute MIN or MAX on a column containing only characters.

Domain

Performance Concepts

Question 58Correct

The Query Processing Layer can run multiple compute clusters (virtual warehouses) simultaneously. Which statement is true regarding how the compute clusters access data?

Each virtual warehouse gets a complete copy of all data.

Each virtual warehouse gets a portion of the data.

Your answer is correct

Each virtual warehouse accesses the same shared data.

Overall explanation

Snowflake stores data similarly to a shared-disk architecture, i.e., the data is shared. But it also allows for using several compute engines on the same shared data, each with its own memory and processing capabilities. <https://docs.snowflake.com/en/user-guide/intro-key-concepts#snowflake-architecture>

Domain

Architecture

Question 59Correct

You are required to see the query history for a date seven months ago. Which of the following methods will provide you with the query history for seven months ago?

Request Snowflake support to provide query history

Use the QUERY_HISTORY table function in the INFORMATION schema

View the historical queries using the query history page

Your answer is correct

Use the QUERY_HISTORY view in the ACCOUNT_USAGE schema

Overall explanation

The views in the ACCOUNT_USAGE schema provide up to 365 days of history for various information. The history of queries from 7 months ago can only be retrieved using the QUERY_HISTORY view in the ACCOUNT_USAGE schema. The QUERY HISTORY table function in the INFORMATION schema can only provide seven days of history. The query history page can only show the history of executed queries within the last 14 days. <https://docs.snowflake.com/en/sql-reference/account-usage#differences-between-account-usage-and-information-schema>

Domain

Account Usage & Monitoring

Question 60Correct

Which of the following statements best describe Snowpark? Select all that apply.

Your selection is correct

Snowpark is a library created by Snowflake that provides APIs for accessing and processing data in applications written in a programming language other than SQL.

Snowpark does not rely on the Snowflake SQL execution engine.

Snowflake provides APIs that allows programmers to access the internals of the Snowflake cloud services layer.

Your selection is correct

Snowpark automatically converts the data-processing programming constructs to SQL and pushes them down to Snowflake for execution.

Overall explanation

Snowpark is a library created by Snowflake that provides APIs for accessing and processing data in applications written in a programming language other than SQL.

Snowpark allows programmers to utilize common programming languages such as Java, Scala, and Python to construct apps that handle data using standard programming structures. Snowpark automatically converts the data-processing programming constructs to SQL and sends them to Snowflake for execution.

<https://docs.snowflake.com/en/developer-guide/snowpark/index>

Domain

Extending Snowflake Functionality

Question 61Correct

A multi-cluster virtual warehouse of size X-Large has 1 cluster running for 1 hour. Due to query demands, it scales out (adds another cluster) and then runs the two clusters for another hour. What is the total number of credits consumed by the multi-cluster virtual warehouse?

64

Your answer is correct

48

16

32

Overall explanation

1 cluster of X-Large multi-cluster virtual warehouse running for 1 hour = 16 credits

2 clusters of X-Large multi-cluster virtual warehouse running for 1 hour = 16 credits * 2
= 32

Total = 48

Domain

Performance Concepts

Question 62Correct

When sharing with a non-Snowflake user, the reader account belongs to which account?

Both the data provider & the data consumer

The data consumer

Your answer is correct

The data provider

Neither the data provider nor the data consumer

Overall explanation

A reader account is created by the data provider and owned by the data provider. The data provider bears the compute costs incurred in a reader account.

<https://docs.snowflake.com/en/user-guide/data-sharing-reader-create#who-provides-support-for-a-reader-account>

Domain

Data Sharing

Question 63Correct

Which of the following statements best describe Snowflake's access control mechanism? Select all that apply.

Your selection is correct

Privileges can be granted on securable objects.

Your selection is correct

Roles can be granted to other roles.

Your selection is correct

Roles can be granted to other users.

Roles can NOT be granted to other roles.

Overall explanation

Objects or entities that can be granted privileges are called securable objects. Each securable object can be assigned a set of rights. Privileges can only be granted to roles; they cannot be granted directly to individual users. Therefore, it is possible to grant roles to other users or other roles. <https://docs.snowflake.com/en/user-guide/security-access-control-overview>

Domain

Security

Question 64Correct

Which of the following roles are available out of the box in Snowflake?

Your selection is correct

ACCOUNTADMIN

Your selection is correct

SECURITYADMIN

ROOT

Your selection is correct

USERADMIN

Overall explanation

Built-in Snowflake roles include ORGADMIN, ACCOUNTADMIN, USERADMIN, SECURITYADMIN, SYSADMIN, and PUBLIC. <https://docs.snowflake.com/en/user-guide/security-access-control-overview#system-defined-roles>

Domain

Security

Question 65Correct

True or False: An ACCOUNTADMIN or SECURITYADMIN can disable a user's MFA and allow the user to re-enroll in MFA if required.

Your answer is correct

True

False

Overall explanation

Multi-factor authentication (MFA) is enabled by default for all Snowflake accounts, and any Snowflake user can enroll themselves in MFA through the Snowflake web interface. An administrator can disable a user's MFA enrolment; in this case, the user must re-enroll to access the MFA features and functionality. An administrator with the

SECURITYADMIN or above role can disable MFA for a user.

<https://docs.snowflake.com/en/user-guide/security-mfa>

Domain

Security

Question 66Correct

Which of the following can be tracked and managed by a resource monitor?

Your selection is correct

A single virtual warehouse

A single Snowpipe

Your selection is correct

A group of virtual warehouses

Your selection is correct

The whole account

Overall explanation

Resource monitors can track & manage a single virtual warehouse or multiple virtual warehouses together. Resource Monitors can also be created at the account level, which means that such resource monitors track credit usage at the account level, considering the credit usage of all virtual warehouses. Resource Monitors can not manage costs for Snowpipe or other serverless functions. <https://docs.snowflake.com/en/user-guide/resource-monitors#assignment-of-resource-monitors>

Domain

Account Usage & Monitoring

Question 67Correct

Which of the following can be enabled by an ORGADMIN using the `SYSTEM$GLOBAL_ACCOUNT_SET_PARAMETER` function?

Your selection is correct

Client Redirect

Automatic Clustering

Time Travel

Data Sharing

Your selection is correct

Replication

Overall explanation

This function can be used to enable replication and failover features (including Client Redirect) for the specified account.

This function can only be called by the Organization Administrator (using the ORGADMIN role). The ORGADMIN must call this function once for each account for which the replication and failover features are to be configured.

https://docs.snowflake.com/en/sql-reference/functions/system_global_account_set_parameter

Domain

Business Continuity and Disaster Recovery

Question 68Correct

What is the purpose of the CURRENT_TASK_GRAPHS table function in Snowflake?

Your answer is correct

CURRENT_TASK_GRAPH table function provides details about the tasks that are scheduled or currently executing

Explanation

The CURRENT_TASK_GRAPH table function provides information on graphs that are currently running or scheduled to be executed within the next 8 days. A graph may be a single task or a task graph consisting of multiple tasks.

See the link for more information:

https://docs.snowflake.com/en/sql-reference/functions/current_task_graphs

CURRENT_TASK_GRAPH table function provides a historical record of task executions.

Explanation

The function that provides historical records of task executions in Snowflake is TASK_HISTORY or COMPLETE_TASK_GRAPHS.

The CURRENT_TASK_GRAPH table function provides comprehensive details about all of the tasks within the system.

Explanation

For comprehensive details about all tasks within the system, the appropriate command is SHOW TASKS.

The CURRENT_TASK_GRAPH table function shows the resource usage statistics for all tasks in the system.

Explanation

Resource usage statistics would typically be obtained from other functions or views, such as the WAREHOUSE_METERING_HISTORY view.

Domain

Tasks

Question 69Correct

When creating a clustering key with multiple columns, in what order should the columns be specified in the CLUSTER BY clause?

Highest cardinality to lowest cardinality.

Alphabetical order.

Reverse alphabetical order.

Your answer is correct

Lowest cardinality to highest cardinality.

The order does not matter.

Overall explanation

When defining clustering keys, the initial candidate clustering columns are those columns that are frequently used in the WHERE clause or other selective filters.

Additionally, columns that are used for joining can also be considered. Furthermore, the

columns' cardinality (number of distinct values) is also important. It is crucial to choose a column with a high enough cardinality to allow effective partition pruning while having a low enough cardinality for Snowflake to group data into micro-partitions efficiently. A column with too few distinct values (e.g., gender) will result in minimal partition pruning. On the other hand, a column that has too many distinct values (e.g., customer id) will result in too much overhead when maintaining the partitions. When creating a multi-column cluster key, order the columns from the lowest cardinality to the higher cardinality; otherwise, the effectiveness of clustering will be reduced.

<https://docs.snowflake.com/en/user-guide/tables-clustering-keys>

Domain

Performance Concepts

Question 70Correct

What is the minimum Snowflake edition that supports Column Level Masking?

Business Critical

Virtual Private Snowflake

Your answer is correct

Enterprise

Standard

Overall explanation

The Enterprise edition has several additional capabilities not provided in the Standard edition. These include multi-cluster virtual warehouses, column-level masking, row access policies, materialized views, and search optimization.

<https://docs.snowflake.com/en/user-guide/intro-editions.html>

Domain

Licensing & Features

Question 71Correct

Which type of Snowflake tables will cease to exist once the session is closed?

Clustered

Permanent

Your answer is correct

Temporary

Transient

Overall explanation

Temporary tables are local to a session and are dropped as soon as the session is closed.

<https://docs.snowflake.com/en/user-guide/tables-temp-transient>

Domain

Data Protection

Question 72Correct

Which of the following factors drive the costs associated with materialized view maintenance?

Select two answers.

Your selection is correct

Whether or not a clustering key is defined on the materialized view.

Your selection is correct

How frequently does the data in the base table change.

How frequently is the materialized view queried.

How frequently is the base table queried.

Overall explanation

The costs of keeping data in materialized views are impacted by

- 1) The number of materialized views created for each base table.
- 2) The extent of data changes occurring in these materialized views when changes are made to the base table.
- 3) The number of these materialized views with a clustering key is defined.

<https://docs.snowflake.com/en/user-guide/views-materialized#label-materialized-views-maintenance-billing>

Domain

Performance Concepts

Question 73Correct

In Snowflake, all data at rest is encrypted using which encryption method?

Your answer is correct

AES 256-bit encryption

SHA

AES 128-bit encryption

MD5

Overall explanation

In Snowflake, all data at rest is encrypted using AES 256-bit encryption.

<https://docs.snowflake.com/en/user-guide/security-encryption-manage>

Domain

Security

Question 74Correct

Columns with which data types can be used as clustering keys?

Select two.

VARIANT

GEOGRAPHY

Your selection is correct

GEOMETRY

Your selection is correct

BINARY

OBJECT

Overall explanation

Clustering keys can be of any data type except GEOGRAPHY, VARIANT, OBJECT, or ARRAY

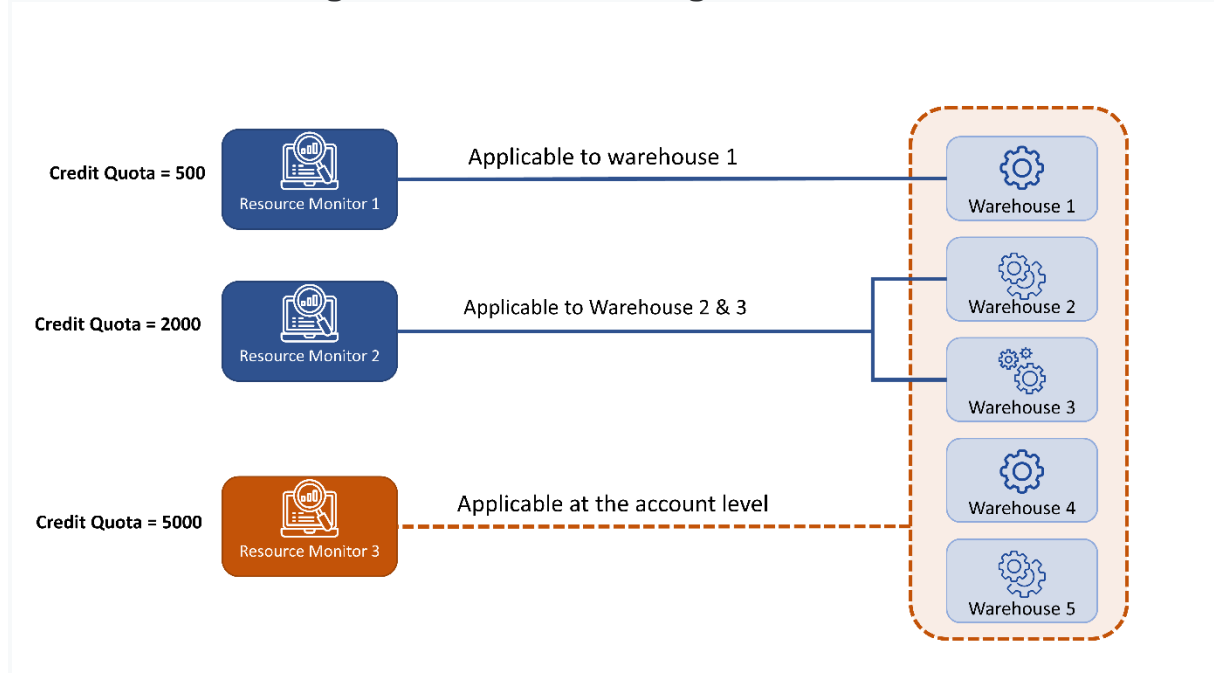
<https://docs.snowflake.com/en/user-guide/tables-clustering-keys#defining-a-clustering-key-for-a-table>

Domain

Performance Concepts

Question 75Correct

Consider the following resource monitor configuration.



What is the maximum credit that Warehouse 1 can use?

2500

5000

Your answer is correct

500

1000

2000

Overall explanation

Resource monitors can track & manage a single virtual warehouse against a defined quota. Resource monitors can be created to track the credit usage of multiple virtual warehouses together.

Resource Monitors can also be created at the account level, which means that such resource monitors track credit usage at the account level, considering the credit usage of all virtual warehouses.

<https://docs.snowflake.com/en/user-guide/resource-monitors#assignment-of-resource-monitors>

Domain

Account Usage & Monitoring

Question 76 **Correct**

Which of the following correctly describes Data Exchange?

Data Exchange is a mechanism to email data extracts from a Snowflake table securely.

Data Exchange transfers data from on-premise to a Snowflake cloud storage using the COPY command.

Data Exchange is another name for One Drive storage which can be used to share Snowflake data

Your answer is correct

Data Exchange is your own private hub for sharing data with a small group of people or organizations you invite.

Overall explanation

Data Exchange is your own private hub for sharing data with a small group of people or organizations who have been invited to join. The owner of the Data Exchange account is in charge of inviting members and specifying whether they can share, consume, or do both. <https://docs.snowflake.com/en/user-guide/data-exchange>

Domain

Data Sharing

Question 77 **Correct**

You are required to regularly refresh the metadata for a directory table for an external stage. Which of the following methods can you use?

Select all that apply.

Configure a Resource Monitor to refresh the stage periodically.

Request Snowflake support to refresh the stage periodically.

Your selection is correct

Run ALTER STAGE <stage-name> REFRESH; periodically to manually refresh the metadata.

Your selection is correct

Configure even notifications on the cloud platform and set the stage to auto-refresh.

Overall explanation

A directory table's metadata can be manually refreshed.

ALTER STAGE <stage-name> REFRESH;

In the case of an external stage, a directory table's metadata can also be automatically refreshed using cloud provider event notification services

AUTO_REFRESH = true

configuration for cloud provider notification.

<https://docs.snowflake.com/en/user-guide/data-load-dirtables-intro#automatically-refreshing-directory-table-metadata>

Domain

Data Transformation

Question 78Correct

Which of the following statistics indicate if partitioning pruning has occurred?

Select two.

Bytes Scanned

Bytes Written

Your selection is correct

Partitions total

Total Bytes

Your selection is correct

Partitions scanned

Overall explanation

Partition pruning occurs when the number of Partitions scanned is much smaller than Partitions total.

<https://docs.snowflake.com/en/user-guide/ui-query-profile>

Domain

Performance Concepts

Question 79Correct

Which of the following statements are true regarding how Snowflake stores table data?

Select all that apply.

Your selection is correct

Data is stored in micro-partitions

Data is stored as Parquet

Data is stored as CSV

Your selection is correct

Data is automatically compressed

Your selection is correct

Data is stored in columnar format

Overall explanation

Data in Snowflake tables is automatically organized into partitions, known as micro-partition. Each micro-partition generally contains 50MB to 500 MB of uncompressed data. However, the stored size is smaller as Snowflake data is always stored with compression. Within each micro-partition, the data is stored in a columnar format.

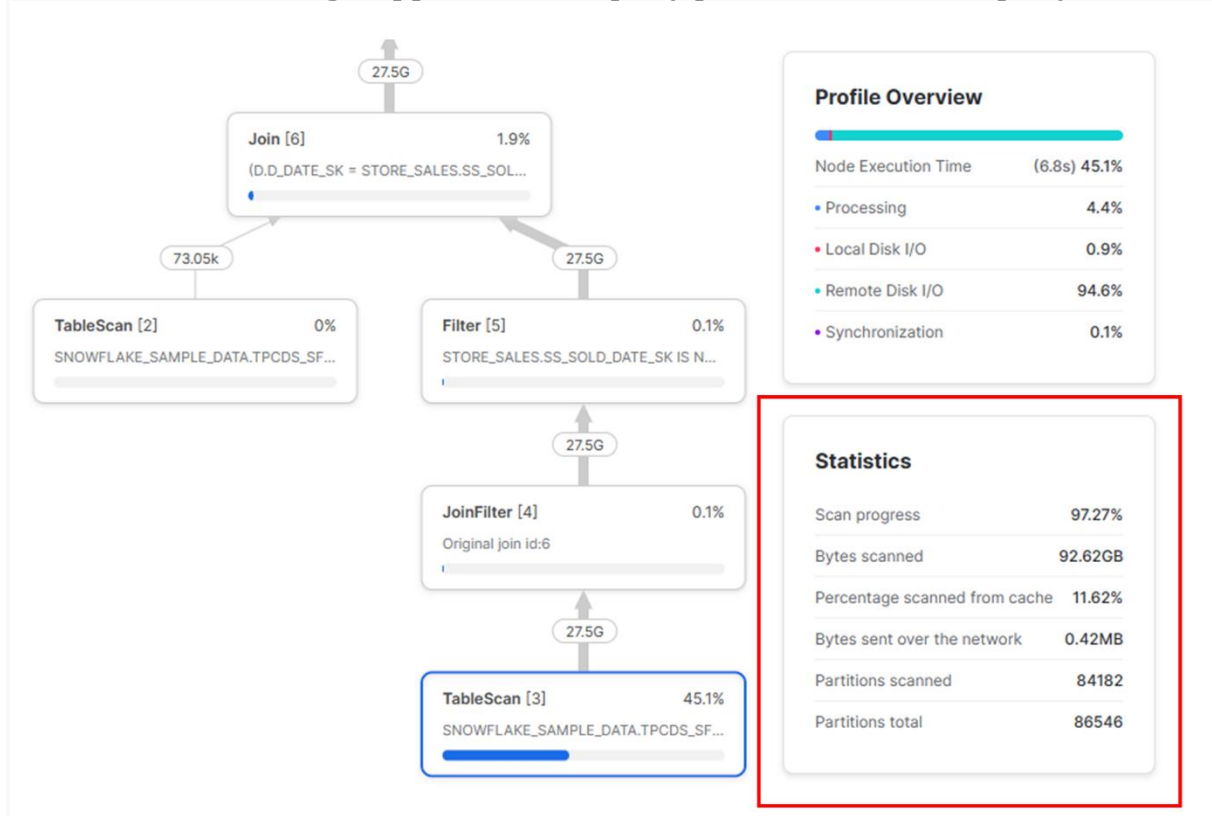
<https://docs.snowflake.com/en/user-guide/tables-clustering-micropartitions>

Domain

Architecture

Question 80Incorrect

Consider the following snippet from the query profile of a finished query.



Which of the following accurately describes the highlighted statistics?

Correct answer

The query profile indicates ineffective partition pruning.

Your answer is incorrect

The query profile indicates extremely effective partition pruning.

The query profile indicates that the virtual warehouse used is too small for the query.

The query profile indicates that the metadata cache was used.

Overall explanation

Partition pruning occurs when the number of Partitions scanned is much smaller than Partitions total. If the partitions scanned equal the partition total, the query scanned the complete table. Therefore, no partition pruning happened, and the clustering key should be improved. <https://docs.snowflake.com/en/user-guide/ui-query-profile>

Domain

Performance Concepts

Question 81

Which of the following ACCOUNT_USAGE view can be used to view privileges granted to roles?

Your answer is correct

GRANTS_TO_ROLES

ACCESS_HISTORY

GRANTS_TO_USERS

OBJECT_DEPENDENCIES

Overall explanation

The GRANTS_TO_ROLES view can be used to view information about access privileges granted to a role. This view also contains historical information (up to 365 days), so privileges that have been granted and revoked in the last 365 days will also be shown.

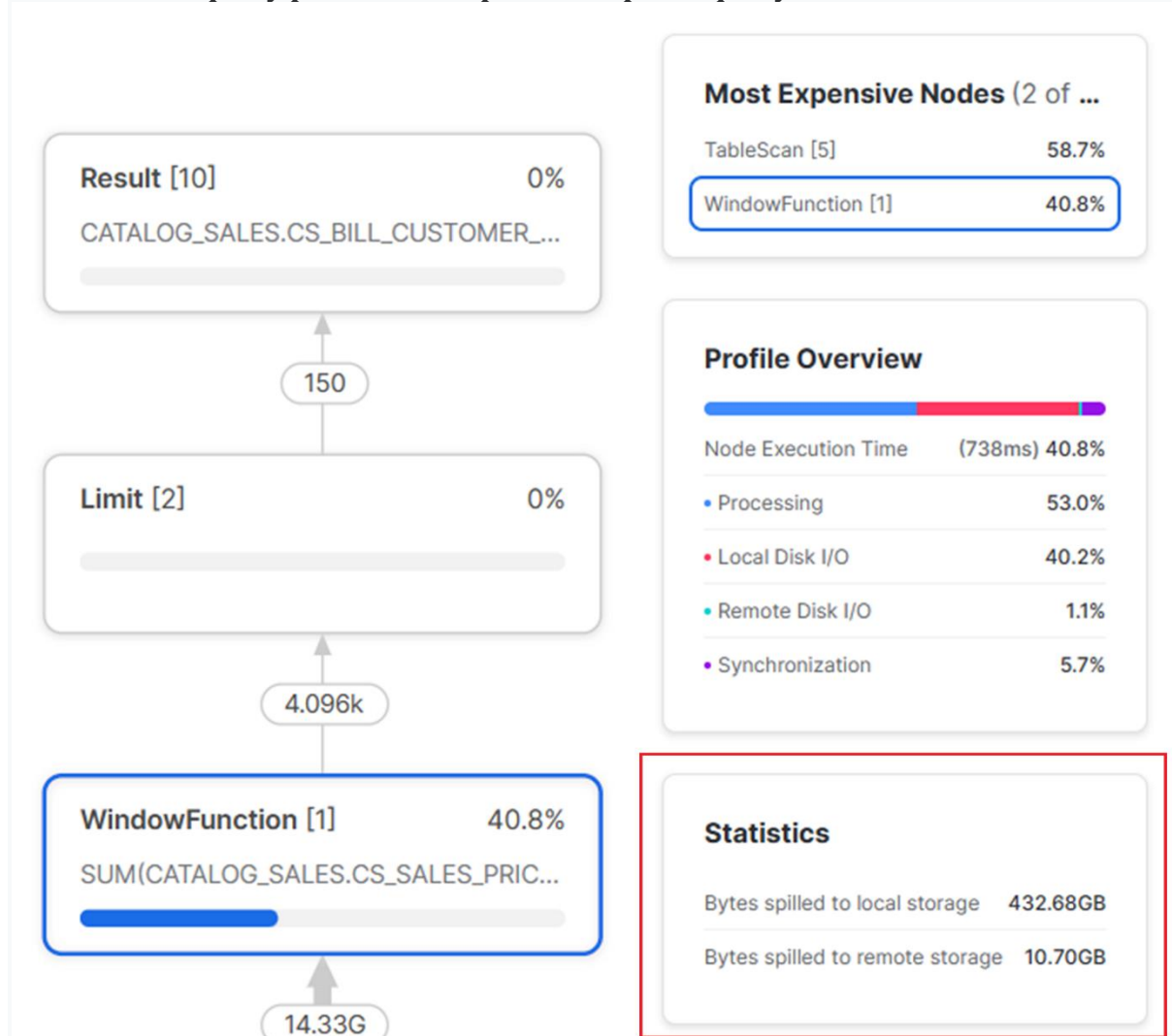
https://docs.snowflake.com/en/sql-reference/account-usage/grants_to_users

Domain

Account Usage & Monitoring

Question 82Correct

Consider the query profile for a specific step in a query.



Which of the following accurately describes the highlighted statistics? Select all that apply.

Your selection is correct

A larger virtual warehouse size will likely reduce local and remote spilling.

The query profile indicates that the metadata cache was used.

The query profile indicates effective partition pruning.

Your selection is correct

The query profile indicates that the step is too significant to fit in the virtual warehouse memory.

Overall explanation

Snowflake saves data on the warehouse's local disk if it can't fit an operation into memory. Data spilling slows down queries because it requires more IO operations, and disk access is slower than memory access. "Bytes spilled to local storage." indicates local spillage. Snowflake will spill data to remote cloud storage if the local disk becomes full, which is even slower storage than the local disk, making this operation even slower.

"Bytes spilled to remote storage" in the query profile indicates remote spillage. One of the ways to avoid spilling is to use a larger warehouse, which will increase the overall available RAM, local storage, and parallelism and might be able to fit the query in memory. <https://docs.snowflake.com/en/user-guide/ui-query-profile#queries-too-large-to-fit-in-memory>

Domain

Performance Concepts

Question 83Correct

You can upload data into which of the following stages using the PUT command? Select all that apply.

Your selection is correct

Table Stage

External Stage

Your selection is correct

Named Internal Stage

Your selection is correct

User Stage

Overall explanation

The PUT command uploads data from an on-premises system to an internal stage (including named internal stages, table stages & user stages). The GET command is used to download data from an internal stage to an on-premises system. To download or upload data to an external stage, cloud provider utilities or other tools are used to interact with data in the cloud storage pointed to by the external stage.

<https://docs.snowflake.com/en/user-guide/data-unload-overview#bulk-unloading-process>

Domain

Data Loading and Unloading

Question 84Correct

Which of the following functions does the Cloud Services Layer perform? Select all that apply

Your selection is correct

Query Result Caching

Your selection is correct

Query Optimization

Query Processing

Your selection is correct

Query Planning

Overall explanation

The cloud services layer is responsible for query planning and optimization. Virtual warehouses perform the query processing, but once a result set has been created, it is

stored in the query result cache, which is part of the cloud services layer.
<https://docs.snowflake.com/en/user-guide/intro-key-concepts#cloud-services>

Domain

Architecture

Question 85Correct

Which of the following illustration represents the least well-clustered table?

1 A — E F — L M — O P — U V — Z

2 A — E F — N
M — O P — U V — Z

3 A — E F — N P — X
M — O V — Z

4
A — Z
A — Z
A — Z
A — Z
A — Z

1
2
3

Your answer is correct

4

Overall explanation

For a populated table, the clustering depth is the average depth of overlapping micro-partitions for specific columns. The clustering depth starts at 1 (for a well-clustered table) and can be a larger number. If the average depth is smaller, the data for the specified columns are better clustered. <https://docs.snowflake.com/en/user-guide/tables-clustering-micropartitions#label-clustering-depth>

Domain

Performance Concepts

Question 86Correct

Basic Transformations during the COPY process are supported by which of the following stage types?

Table Stage

Your selection is correct

External Stage

Your selection is correct

Named Internal Stage

Overall explanation

The table stages do not allow basic transformations during the COPY process; thus, basic transformations may only be performed while loading data from external stages,

named internal stages or user stages. <https://docs.snowflake.com/en/user-guide/data-load-local-file-system-create-stage#table-stages>

Domain

Data Loading and Unloading

Question 87Correct

An external function's code is stored in which location?

In a table

In a code repository in the cloud services layer

In the Snowflake metadata

Your answer is correct

Outside of Snowflake

Overall explanation

An external function, unlike other UDFs, does not include its own code; instead, it invokes code that is stored and run outside of Snowflake. For an external function, the only thing that is kept inside Snowflake is information that Snowflake uses to invoke the remote service that contains the code. <https://docs.snowflake.com/en/sql-reference/external-functions-introduction>

Domain

Extending Snowflake Functionality

Question 88Correct

Which of the following roles can import a dataset from Snowflake Marketplace? Select all that apply.

Your selection is correct

A role that has IMPORT SHARE privileges

SYSADMIN

Your selection is correct

ACCOUNTADMIN

ORGADMIN

Overall explanation

Although any user or role can explore the Snowflake Marketplace, you will need a user with the ACCOUNTADMIN privilege or the IMPORT SHARE privilege for consuming data. For simplicity, we suggest you utilize a user with the ACCOUNTADMIN privilege.

Domain

Data Sharing

Question 89Correct

Which of the following statements is true for Snowflake's key pair authentication?

Select all that apply

Key-pair authentication is supported only by the Business-Critical edition

Your selection is correct

A user may have up to two public keys allocated to them.

It requires inputting your Snowflake username and password for every login attempt

Your selection is correct

If desired, the keys can be rotated.

Overall explanation

Snowflake provides an additional layer of security by supporting key pair authentication in addition to the standard username/password login. This approach comprises private and public keys, with the public key allocated to a user and the private key used for authentication. The user provides a public key during

authentication. A user can have up to two public keys, which can be rotated at any point in time. Key pair authentication is supported by all SnowSQL and Snowflake drivers and connectors. All Snowflake editions support Key-pair authentication
<https://docs.snowflake.com/en/user-guide/key-pair-auth>

Domain

Security

Question 90Incorrect

Which of the following statements best describe Snowflake's federated authentication?
Select all that apply

Correct selection

Once authenticated with an external identity provider, a user is not required to submit their Snowflake username & password individually.

Your selection is correct

Snowflake is compatible with the majority of SAML 2.0 identity providers.

Your selection is correct

Snowflake has native support for Okta and ADFS.

After being authorized by an external identity source, users must enter their Snowflake username and password.

Overall explanation

Snowflake supports federated authentication, allowing for single sign-on (SSO). Users authenticate using a SAML 2.0-compliant external identity provider (IdP). After IdP authentication, users can access Snowflake without logging in. Snowflake natively supports the majority of SAML 2.0 compliant identity providers, including Okta, ADFS, OneLogin, and Ping Identity PingOne. <https://docs.snowflake.com/en/user-guide/admin-security-fed-auth>

Domain

Security

Question 91Correct

During a weekly release cycle, which of the following accounts may be updated on the second day of release?

Only business critical edition accounts

Your selection is correct

All enterprise edition (and above) accounts that have not opted into early access

Your selection is correct

All standard edition accounts

Only those Enterprise edition accounts which have opted into early access

Overall explanation

Snowflake does not instantly deploy a new version to all Snowflake accounts; rather, customer accounts are moved into the new release over time in a phased manner. Day 1 (early access): Deployed for Enterprise edition (or higher) accounts that have elected for early access. You can enroll an Enterprise edition (or higher) account for early access by contacting Snowflake support. Day 1 or 2 (regular access): Deployment of all Snowflake accounts on the Standard edition. Day 2 (last): All remaining Enterprise edition (or higher) accounts are deployed. Between an early access deployment and a final deployment, a minimum of 24 hours must pass. This staged release strategy enables Snowflake to identify and address any software issues uncovered during early access. <https://docs.snowflake.com/en/user-guide/intro-releases>

Domain

Account

Question 92Correct

What is the minimum Snowflake edition which supports multi-factor authentication (MFA)?

Virtual Private Snowflake

Business Critical

Enterprise

Your answer is correct

Standard

Overall explanation

All Snowflake editions support MFA; thus, the minimum edition that supports it is the Standard edition. <https://docs.snowflake.com/en/user-guide/intro-editions.html>

Domain

Licensing & Features

Question 93Correct

True or False: A database is created from a share by the consuming account; the access to this database is configurable using Snowflake's role-based access control.

False

Your answer is correct

True

Overall explanation

Correct. Role-based access control (RBAC), typically used for securing objects in a Snowflake account, also applies to consumer accounts and can control access to databases created on shared objects. <https://docs.snowflake.com/en/user-guide/data-share-consumers>

Domain

Data Sharing

Question 94Incorrect

Which of the following statements regarding built-in roles' privileges in Snowflake are true?

Select all that apply.

Your selection is correct

SECURITYADMIN can drop USERS created by a USERADMIN

Your selection is correct

ACCOUNTADMIN can delete objects created by a SYSADMIN

Correct selection

ACCOUNTADMIN can modify a ROLE created by the SECURITYADMIN

The PUBLIC role can delete objects created by SYSADMIN

Overall explanation

Due to the role hierarchy and privileges inheritance, the ACCOUNTADMIN has all the privileges that lower roles have. Therefore, It can delete and modify objects created by lower roles.

Similarly, SECURITYADMIN is a higher role than USERADMIN and can drop a user created by the USERADMIN.

<https://docs.snowflake.com/en/user-guide/security-access-control-overview#system-defined-roles>.

Domain

Security

Question 95Correct

True or False: A directory table can be enabled while creating a Stage object or enabled afterward.

Your answer is correct

True

False

Overall explanation

A directory table is not a separate database object but is an implicit object available with a stage. You can enable the directory table for a stage while creating the stage or enable it afterward.

<https://docs.snowflake.com/en/user-guide/data-load-dirtables>

Domain

Data Transformation

Question 96Correct

True or False: The data in the views in the INFORMATION_SCHEMA can have a latency of up to 3 hours.

Your answer is correct

False

True

Overall explanation

The data provided via the INFORMATION_SCHEMA views is real-time, and there is no latency in the information provided. So, if you are asked which schema should be used if there is a requirement to view real-time data, then the views in INFORMATION_SCHEMA should be used as they contain real-time information.

<https://docs.snowflake.com/en/sql-reference/account-usage#differences-between-account-usage-and-information-schema>

Domain

Account Usage & Monitoring

Question 97Incorrect

Which of the following correctly describes Automatic Clustering? Select all that apply.

Your selection is incorrect

Automatic Clustering can be turned off at the account level.

Automatic Clustering requires an active virtual warehouse to be running.

Correct selection

Automatic Clustering redistributes data in micro-partitions based on the clustering key.

Your selection is correct

Automatic Clustering is a serverless service.

Overall explanation

For tables with a clustering key defined, Automatic Clustering, a Snowflake service, manages the re-clustering as needed, distributing data according to the clustering key. Snowflake internally maintains the clustered tables and any resource requirements with Automatic Clustering. Automatic Clustering only adjusts those micro-partitions which benefit from the re-clustering process. <https://docs.snowflake.com/en/user-guide/tables-auto-reclustering>

Domain

Performance Concepts

Question 98Correct

Which of the following occurs when a Snowflake account shares a table with another Snowflake account? Select all that apply.

Your selection is correct

No actual data is copied or transferred between accounts.

Data is copied to the target Snowflake account.

The target Snowflake account is charged for shared data storage.

Your selection is correct

Sharing is managed through the Snowflake metadata services layer.

Overall explanation

In Snowflake sharing, no data is copied. Instead, it is just the metadata that enables the sharing of data. Since no data is copied, the target Snowflake account (the consumer) is NOT charged for any storage. <https://docs.Snowflake.net/manuals/user-guide/data-sharing-intro.html#how-does-secure-data-sharing-work>

Domain

Data Sharing

Question 99Correct

Which of the following roles can create & manage users? Select all that apply

Your selection is correct

ACCOUNTADMIN

Your selection is correct

SECURITYADMIN

Your selection is correct

USERADMIN

SYSADMIN

Overall explanation

The USERADMIN role is typically meant for creating and managing users. However, the privileges of the USERADMIN role are inherited by SECURITYADMIN and ACCOUNTADMIN; therefore, they also get the privileges to create users. ACCOUNTADMIN is the most powerful role anyway and can do anything in a Snowflake account. <https://docs.snowflake.com/en/user-guide/security-access-control-overview#system-defined-roles>.

Domain

Security

Question 100Correct

What is the range of latency of data in the ACCOUNT_USAGE schema?

5 - 10 mins

Your answer is correct

45 mins to 3 hours

No latency

5 - 10 days

Overall explanation

The ACCOUNT_USAGE schema consists of several views that provide usage metrics and metadata information at the account level. Data provided by the ACCOUNT_USAGE views is NOT real-time and refreshes typically with a lag of 45 minutes to 3 hours, depending on the view. The data in these views are retained for up to 365 days.

<https://docs.snowflake.com/en/sql-reference/account-usage#differences-between-account-usage-and-information-schema>

Domain

Account Usage & Monitoring

Question 101Correct

Consider the following scenario. Queries are running on a multi-cluster virtual warehouse of size Large, and the scaling policy is set to Standard. The warehouse is currently executing the maximum number of queries that it can accommodate. What happens when an additional query is run?

Your answer is correct

An additional virtual warehouse of size Large is added almost immediately to the cluster and runs the additional query.

The size of the virtual warehouse is scaled up to 4X-Large.

The multi-cluster virtual warehouse only adds a new virtual warehouse if the system determines there is enough work to keep it busy for at least 6 minutes.

Overall explanation

When the scaling policy is set to Standard (also the default), Snowflake attempts to reduce queuing by launching additional warehouses soon after queuing is detected. As soon as queries start queuing or there are more queries than the present set of virtual warehouses can handle, the first additional warehouse is spun up immediately.

Additional warehouses may be spun up if the volume of requests is causing queuing to continue. Additional warehouses are started 20 seconds after the preceding warehouse has started. Once the workload starts diminishing, the system does 2-3 consecutive checks to assess whether the workload can be reallocated to other warehouses without the need to spin up another warehouse again. If the criteria are met, the virtual warehouse is scaled-down. The scale-down checks are carried out at one-minute intervals. <https://docs.snowflake.com/en/user-guide/warehouses-multicluster#setting-the-scaling-policy-for-a-multi-cluster-warehouse>

Domain

Performance Concepts

Question 102Correct

Which of the following objects may be shared via direct data sharing?

Your selection is correct

External Tables

Your selection is correct

Secure UDFs

Your selection is correct

Tables

Resource Monitors

Virtual Warehouses

Overall explanation

Direct data sharing enables sharing of the following types of objects: Tables, External tables, Secure views, Secure materialized views, Secure UDFs.

<https://docs.snowflake.com/en/user-guide/data-sharing-intro>

Domain

Data Sharing

Question 103Correct

True/False: If you use a specific virtual warehouse to load data into a table, you must use the same virtual warehouse to query that data.

True

Your answer is correct

False

Overall explanation

You can use any virtual warehouse to access the data. Snowflake stores data in a shared manner, like in shared-disk architecture. But it also allows for using several compute engines, each with its own memory and processing capabilities. The virtual warehouses are independent of each other but access and process the same shared data.

<https://docs.snowflake.com/en/user-guide/intro-key-concepts#snowflake-architecture>

Domain

Architecture

Question 104Correct

Which of the following statements correctly describes natural clustering in Snowflake?

Snowflake can determine the best clustering key based on the natural keys defined for the table.

Natural clustering is the name of the service that maintains micro-partitions.

Your answer is correct

Snowflake clusters data in the order it was loaded into a table.

Natural clustering is the process of defining explicit clustering keys.

Overall explanation

Typically, in data warehouses, data arrives and gets loaded daily. Without an explicit clustering key, Snowflake will cluster the data based on the order in which it was inserted into a table. Often natural clustering is good enough for large transactional tables with data arriving based on a date, such as an order table, in which rows often have an order date.

<https://docs.snowflake.com/en/user-guide/tables-clustering-micropartitions>

Domain

Architecture

Question 105Incorrect

What are some of the ways to improve performance in Snowflake? Select all that apply

Secondary Indices

Your selection is correct

Multi-cluster Virtual Warehouse

Correct selection

Dedicated Virtual Warehouse

Your selection is correct

Query Result Caching

Your selection is correct

Clustering Keys

Overall explanation

Snowflake's unique architecture and the underlying micro-partitions storage technology mean it is not required to perform much query tuning in most situations. There are, however, several performance improvement approaches that are available and are used to increase Snowflake's overall performance. These include · Internal caching mechanisms that operate transparently in the background to increase performance. · Scaling up or increasing the capacity of a virtual warehouse to allow for more processing power to be available for complex queries · Horizontal scaling by increasing the capacity by using a multi-cluster virtual warehouse to handle a large number of concurrent users and concurrent queries · Automatic static and dynamic partition pruning can reduce unneeded partitions while processing a query. · It is possible to accomplish better partition pruning by redistributing data in micro-partitions using clustering keys. · Pre-computing results of complex, regularly executed queries by using materialized views. · Using Search Optimization services to improve the performance of specific types of lookup queries

Domain

Performance Concepts

Question 106**Correct**

True/False: When a virtual warehouse is suspended, It does not go into a suspended state until all ongoing queries that use that virtual warehouse are finished.

Your answer is correct

True

False

Overall explanation

When a virtual warehouse is requested to be suspended, it does not enter a suspended state until all active queries using that virtual warehouse have been completed. Note that when a resource monitor performs a "suspend immediately" on a virtual warehouse after a credit limit has been reached, the virtual warehouse is suspended immediately, stopping all running queries. <https://docs.snowflake.com/en/user-guide/warehouses-tasks>

Domain

Architecture

Question 107**Incorrect**

Which of the following ACCOUNT_USAGE view can be used to view credit usage by hour?

Your answer is incorrect

METERING_DAILY_HISTORY

Correct answer

METERING_HISTORY

WAREHOUSE_EVENTS_HISTORY

WAREHOUSE_LOAD_HISTORY

Overall explanation

The METERING_HISTORY provides the credit usage data at an hourly level. The view provides the start and end times during which credit usage occurred. It also provides a breakup of the information according to the service that contributed to the credit usage, such as Virtual Warehouse compute usage, Snowpipe, Automatic Clustering, etc.

https://docs.snowflake.com/en/sql-reference/account-usage/metering_history

Domain

Account Usage & Monitoring

Question 108Correct

What is the minimum Snowflake edition required for securely sharing data across regions and cloud platforms (via replication)?

Virtual Private Snowflake

Enterprise

Business Critical

Your answer is correct

Standard

Overall explanation

Database sharing across regions and clouds (via replication) is supported in all Snowflake editions; thus, the minimum edition that supports it is the Standard edition.

<https://docs.snowflake.com/en/user-guide/intro-editions.html>

Domain

Licensing & Features

Question 109Correct

Which of the following are the key layers in Snowflake architecture? Select all that apply.

Your selection is correct

Cloud Services

Global Services

Authentication Services

Your selection is correct

Database Storage

Your selection is correct

Query Processing

Overall explanation

Snowflake architecture has three distinct layers: Database Storage - Cheap cloud storage on AWS, Azure, or Google Cloud Query Processing - Primarily composed of virtual warehouses Cloud Services - The brain of the whole operation

<https://docs.snowflake.com/en/user-guide/intro-key-concepts#snowflake-architecture>

Domain

Architecture

Question 110Correct

As an administrator, you are required to find all users that logged in to the system during the past 15 minutes. Which of the following options should you use?

Use the views in the ACCOUNT_USAGE schema

Use cloud provider logs to ascertain the users that recently logged in

Your answer is correct

Use the table functions provided in the INFORMATION_SCHEMA schema

Analyze the system logs to find out who logged in

Overall explanation

Because there is a requirement to see the logins from the last 15 minutes, you must use the INFORMATION_SCHEMA, since it contains near real-time information.

<https://docs.snowflake.com/en/sql-reference/account-usage#differences-between-account-usage-and-information-schema>

Domain

Account Usage & Monitoring

Question 111Correct

Which of the following Snowflake objects do not contribute towards storage costs?

Select two.

Materialized View

Your selection is correct

View

Transient Tables

Your selection is correct

Secure View

Temporary Table

Overall explanation

Views & Secure view do not use any storage. Both of these objects consist of an SQL statement, which is executed at runtime.

Materialized view persists the results of the SQL in its definition and, therefore, uses storage.

Both temporary and transient tables use storage.

<https://docs.snowflake.com/en/user-guide/views-introduction>

Domain

Snowflake's catalog and objects

Question 112Correct

Which of the following statements best describes SnowSQL?

Your answer is correct

A command-line interface to connect to your Snowflake instance

A lightweight desktop application with a user interface to administer your Snowflake instance.

A mobile app that can be used to connect to your Snowflake instance.

A web-based interface to connect to your Snowflake instance.

Overall explanation

SnowSQL connects to Snowflake through the command line and executes SQL queries on your Snowflake instance. SnowSQL is available for Linux, Windows, and Mac OS.

<https://docs.snowflake.com/en/user-guide/snowsql>

Domain

Tools & Interfaces

Question 113Correct

A materialized view contributes to which of the following costs?

Select all that apply.

Your selection is correct

Storage Costs

Replication costs

Virtual Warehouse Costs

Your selection is correct

Serverless Costs

Overall explanation

Each materialized view stores query results, which contributes to the storage use.

Snowflake also performs automatic background maintenance on materialized views to prevent them from getting out-of-date. When a base table is modified, all materialized views created on that table are updated by a background service utilizing Snowflake compute resource (serverless from the customer's point of view).

<https://docs.snowflake.com/en/user-guide/views-materialized#materialized-views-cost>

Domain

Cost & Pricing

Question 114Correct

Your security administrator has created Row Access Policies on a table. What type of security has the administrator implemented?

Column Level Security

Your answer is correct

Row Level Security

Dynamic Data Masking

Row Elimination

Overall explanation

Row-level security is implemented by creating row access policies, which include conditions and functions that govern which rows are returned during query execution.

<https://docs.snowflake.com/en/user-guide/security-row-intro>

Domain

Security

Question 115Correct

Which of the following objects can be cloned? Select all that apply.

Virtual Warehouse

Your selection is correct

Database

Share

Your selection is correct

Schema

Your selection is correct

Table

Your selection is correct

Task

Overall explanation

Virtual warehouses & Share objects cannot be cloned. Tables, Schemas & Databases can be cloned. Other objects that can be cloned include Stages, File Formats, Tasks, Sequences, and Streams. <https://docs.snowflake.com/en/user-guide/object-clone>

Domain

Cloning

Question 116Correct

Which of the following operations can be performed on an object provided by an inbound share?

DELETE

Your answer is correct

SELECT

UPDATE

ALTER

DROP

Overall explanation

Shared objects are read-only for the consumer and cannot be modified by the consumer. A read-only database created on Share contains the tables and other objects that the data provider added, but the consumer cannot add additional objects. The consumer cannot UPDATE, DELETE data, ALTER, or DROP any objects.

<https://docs.snowflake.com/en/user-guide/data-sharing-intro>

Domain

Data Sharing

Question 117Correct

Which of the following are the four available Snowflake editions? Select all that apply.

Your selection is correct

Standard

Your selection is correct

Virtual Private Snowflake

On-Premise

Your selection is correct

Business Critical

Government

Your selection is correct

Enterprise

Overall explanation

Snowflake provides 4 editions. Standard, Enterprise, Business Critical, and Virtual Private Snowflake (VPS). <https://docs.snowflake.com/en/user-guide/intro-editions.html>

Domain

Licensing & Features

Question 118Correct

Which of the following correctly describes the behavior of a materialized view when columns are changed or dropped from the base table?

Select two answers.

Your selection is correct

You must re-create the materialized view if you want to use it again.

The materialized view is NOT suspended.

You must resume the materialized view if you want to use it again.

The changed and dropped columns are automatically propagated to the materialized view.

Your selection is correct

The materialized view is suspended.

Overall explanation

When columns are changed or dropped from a base table with a materialized view on top, the change is not propagated to the materialized view. The materialized view is suspended and can NOT be resumed. It must be re-created with the corrected definition that reflects the changed/dropped columns.

<https://docs.snowflake.com/en/user-guide/views-materialized#changing-or-dropping-columns-in-the-base-table>

Domain

Performance Concepts

Question 119Correct

A query executed in Snowflake took a long duration to complete. The Query Profile shows that the “Bytes spilled to local storage” was a large number. How can the query performance be improved? Select all that apply.

Your selection is correct

Rewrite the query more optimally so that the partition pruning occurs and the query needs to process less data.

Run the query on a multi-cluster virtual warehouse.

Your selection is correct

Increase the size of the virtual warehouse so that more data can fit in the memory.

Restart the virtual warehouse to clear the local disk cache.

Overall explanation

One of the ways to avoid spilling is to use a larger warehouse, which will increase the overall available RAM, local storage, and parallelism and might be able to fit the query in memory. Another way to optimize a query that spills a lot of data is to limit the number of rows that must be processed. Sometimes this may be achievable by rewriting the query more optimally. Clustering a large table can also help since it allows Snowflake to read only the necessary subset of the data, thus reducing the memory requirement.

<https://docs.snowflake.com/en/user-guide/ui-query-profile#queries-too-large-to-fit-in-memory>

Domain

Performance Concepts

Question 120Correct

As the security administrator for your organization's Snowflake instance, you are required to continuously track a list of all users who logged into the system in the last 60 minutes. Which one of the following methods can you use?

Use the table function INFORMATION_SCHEMA.LOGIN_HISTORY_BY_USER()

Query the view SNOWFLAKE.ACCOUNT_USAGE.LOGIN_HISTORY

Ask Snowflake support to provide these details.

Your answer is correct

Use the table function INFORMATION_SCHEMA.LOGIN_HISTORY ()

Overall explanation

The views in ACCOUNT_USAGE schema can have up to 3 hours of latency. Since the requirement is to continuously track the login history for the last 60 minutes, you will require near real-time information, which is available through the INFORMATION_SCHEMA table functions. In this case, the INFORMATION_SCHEMA.LOGIN_HISTORY() function will fulfill the requirements. Note: INFORMATION_SCHEMA.LOGIN_HISTORY_BY_USER() is unsuitable because it only provides information for a single user. <https://docs.snowflake.com/en/sql-reference/account-usage#differences-between-account-usage-and-information-schema>

Domain

Account Usage & Monitoring

Question 121Correct

You are a developer for a retail organization running a Snowflake data warehouse. You need to upload JSON-based data into a table. What approach should you take?

Write a program using a programming language of your choice (Python, Java, etc.) to process the JSON file into a CSV structure. Then, load the CSV file into the table using the COPY command.

Ask the source system to send you a CSV rather than a JSON file, as Snowflake does not support JSON.

Your answer is correct

Use Snowflake provided functions to process JSON data while loading it into the table.

Overall explanation

Snowflake supports several semi-structured data formats and JSON, Avro, ORC, Parquet, and XML. Snowflake provides the VARIANT data type, which can store any data and is appropriate for semi-structured data input and querying. SQL may be used to read and navigate JSON data once it has been loaded into a VARIANT column.

<https://docs.snowflake.com/en/user-guide/semistructured-intro#loading-semi-structured-data>

Domain

Data Loading and Unloading

Question 122Correct

Which of the following can improve the performance of point lookup queries?

External Tables

Your answer is correct

Search Optimization

Materialized Views

Secure Views

Automatic Clustering

Overall explanation

The search optimization service can be used to improve the performance of point lookup queries that return only one or a few rows and use highly selective filters using equality predicates or IN predicates.

<https://docs.snowflake.com/en/user-guide/search-optimization-service#understanding-the-search-optimization-service>

Domain

Performance Concepts

Question 123Correct

You are a telecom company's data engineer who uses Snowflake as a data warehouse. The company requires all network signaling data to be loaded into a table in near real-time. The network signaling data already lands into an S3 bucket every 1 minute. What is the course of action that you should take?

Select three options; each option forms part of the answer.

Your selection is correct

Configure notification event on the S3 bucket, which triggers the Snowpipe.

Your selection is correct

Create a Snowpipe that loads data from an external stage.

Your selection is correct

Create an external stage on top of the S3 bucket where the near real-time data lands.

Execute RUN Snowpipe to start the snowpipe

Configure the Snowpipe to check for new files in the S3 bucket continuously.

Overall explanation

Snowpipe can load data from an external stage as well as an internal stage. When using an external stage, you can use the cloud platform notifications to trigger your Snowpipe. The cloud platform notifications can be configured to trigger an event as soon as a new file is detected in the cloud storage bucket. Additional configuration links the event to your Snowpipe, so every time new files arrive, the Snowpipe is automatically triggered into action. When triggered, the Snowpipe runs the COPY command from its definition and loads newly received data into the target table. The alternate mechanism is through a REST API call, which requires you to write a program that can trigger the Snowpipe as needed by calling Snowpipe-specific REST APIs. Using REST APIs, you control when you want to trigger the Snowpipe, either on a scheduled or ad-hoc basis. Note that when using internal stages with Snowpipe, you must trigger a Snowpipe via the REST API. There is no provision for a trigger based invocation of Snowpipe when using the internal stage as a source. Note: A snowpipe can not check an S3 bucket directly for a file, and it must be triggered by a notification or a REST API call.

<https://docs.snowflake.com/en/user-guide/data-load-snowpipe-intro>

Domain

Data Loading and Unloading

Question 124Correct

A virtual warehouse provides which of the following resources? Select all that apply.

Shared Storage

Your selection is correct

Temporary Local Storage

Your selection is correct

Memory

Your selection is correct

CPU

Overall explanation

A virtual warehouse provides CPU, memory, and temporary storage resources to process queries and run data load jobs. Each node in a virtual warehouse computes cluster has its own memory, computing resources, and local cache stored on a solid-state disk. <https://docs.snowflake.com/en/user-guide/warehouses-overview>

Domain

Architecture

Question 125Correct

Which one of the following stream types can you use to track data in an external table?

External

Explanation

External is not a valid stream type. The valid stream types are Standard, Insert-only, and append only.

Standard

Explanation

A standard stream type tracks changes in Snowflake's internal storage and can't be used with external tables because external tables don't store data directly in Snowflake; they reference data stored externally in cloud services like S3 or Azure Blob Storage.

Append-only

Explanation

Append-only stream solely tracks row inserts made to tables within Snowflake's managed storage but cannot be used with external tables because external tables do not store data internally within Snowflake.

Your answer is correct

Insert-only

Explanation

Insert-only streams in Snowflake track changes to external tables by capturing both inserts and updates as new rows, but they ignore delete operations. This means they only reflect additions and modifications to data, treating updates as new inserts.

See the link for more details: <https://docs.snowflake.com/en/user-guide/streams-intro#types-of-streams>

Domain

Streams

Question 126Correct

Which of the following are supported in Snowflake Scripting code?

Your selection is correct

EXCEPTION

Your selection is correct

DECLARE

PARALLEL

Your selection is correct

END

NOTIFY

Your selection is correct

BEGIN

Overall explanation

A typical Snowflake Scripting block will have a DECLARE section where variables and cursors may be declared. The BEGIN & END enclose the actual logic of the script and may optionally contain the EXCEPTION section, where you handle any exceptions.

<https://docs.snowflake.com/en/developer-guide/snowflake-scripting/index>

Domain

Extending Snowflake Functionality

Question 127Correct

Snowflake provides which of the following connectors?

Your selection is correct

Snowflake Connector for Kafka

Your selection is correct

Snowflake Connector for Python

Snowflake Connector for Cobol

Snowflake Connector for Assembly

Your selection is correct

Snowflake Connector for Spark

Overall explanation

Snowflake has several drivers and connectors that can be used to connect to your Snowflake instance. These include client tools made by Snowflake, like the web interface and the SnowSQL command-line interface, and drivers and connectors that let different languages and frameworks connect to Snowflake. The following drivers and connectors are currently available · Snowflake Connector for Python · Snowflake Connector for Spark · Snowflake Connector for Kafka · JDBC driver for Snowflake · ODBC driver for Snowflake · .NET driver for Snowflake · Snowflake driver for the Go language · Node.js drivers PHP PDO drivers

Domain

Tools & Interfaces