

# Snowflake Interview Question

## What is Snowflake and what type of database is it?

- Snowflake is a cloud-based data warehousing platform.
- It is a columnar database.
- Offers scalable storage and computing resources.
- Separates storage from compute, allowing independent scaling.
- Provides features like automatic scaling, data sharing, and time travel for efficient data management and analysis.

## What are the main layers of Snowflake's architecture and what are their functions?

Or

## Explain Snowflake architecture

### Storage Layer:

- Responsible for storing all data in Snowflake.
- Uses a columnar storage format for efficient data compression and query performance.
- Provides high durability and availability through replication across multiple storage nodes.

### Compute Layer:

- Handles query processing and execution.
- Scales independently from the storage layer, allowing users to adjust computing resources based on workload.
- Utilizes virtual warehouses to isolate and manage compute resources for different workloads.

### Query Processing Layer:

- Coordinates queries and tasks submitted by users.
- Optimizes query execution plans for efficient resource utilization.
- Distributes query workload across compute nodes for parallel processing.

### **Services Layer:**

- Manages metadata, user sessions, and authentication.
- Handles resource management, security, and data governance.
- Provides interfaces for data loading, data sharing, and administrative tasks.

### **Cloud Services Layer:**

- Facilitates communication between Snowflake and the underlying cloud infrastructure.
- Manages networking, data transfer, and integration with cloud provider services.
- Ensures scalability, fault tolerance, and seamless operation within the cloud environment.

### **What is a virtual warehouse and how does it enable scalability and concurrency?**

- A virtual warehouse in Snowflake is a compute resource used for executing queries and processing data.
- It enables scalability by allowing users to independently scale compute resources up or down based on workload demands.
- Concurrency is facilitated through the use of multiple virtual warehouses, which can be created and allocated to different users or workloads.
- Each virtual warehouse operates independently, enabling concurrent execution of queries without contention for resources.
- Users can allocate dedicated virtual warehouses for specific tasks or workloads, ensuring optimal performance and resource utilization.

### **How does Snowflake enable data recovery using time-travel and fail-safe features?**

#### **Time-Travel:**

- Snowflake's Time Travel feature allows users to recover data by accessing historical versions of the database at different points in time.

- Users can query data from specific timestamps or restore entire tables to previous states.
- Data is retained for a configurable period, typically up to 90 days, allowing users to rewind changes and recover lost or corrupted data.

#### **Fail-Safe:**

- Snowflake automatically maintains multiple copies of data across geographically distributed storage nodes.
- In the event of hardware failures or data corruption, Snowflake automatically switches to healthy replicas to ensure data availability.
- Continuous data replication and redundancy mechanisms provide fail-safe measures against hardware failures, ensuring minimal downtime and data loss.

#### **Is Snowflake an ETL tool or a data warehouse? What ETL tools can be used with Snowflake?**

- Snowflake is primarily a data warehouse platform rather than an ETL tool.
- However, Snowflake integrates with various ETL (Extract, Transform, Load) tools to facilitate data ingestion, transformation, and loading processes.
- ETL tools commonly used with Snowflake include:
  - Informatica
  - Talend
  - Matillion
  - Fivetran
  - Stitch
- These ETL tools connect to Snowflake via JDBC or ODBC connectors, enabling seamless data movement between different systems and Snowflake's data warehouse.

#### **How does Snowflake differ from other cloud platforms such as AWS, Azure, and GCP?**

##### **Architecture:**

- a. Snowflake separates compute and storage, allowing them to scale independently, whereas other cloud platforms typically require users to manage these aspects together.

- b. AWS, Azure, and GCP provide various services for data storage and processing, but they often require more manual configuration and optimization compared to Snowflake's automated approach.

#### **Pricing Model:**

- c. Snowflake offers a pay-as-you-go pricing model based on actual usage, with separate pricing for compute and storage.
- d. AWS, Azure, and GCP also offer pay-as-you-go pricing but may have different pricing structures for their respective data services and resources.

#### **Managed Service:**

- e. Snowflake is a fully managed service, meaning it handles infrastructure provisioning, maintenance, and upgrades automatically.
- f. AWS, Azure, and GCP provide a wide range of services, including data storage and processing, but users are responsible for managing and configuring these services themselves.

#### **Native Integration:**

- g. Snowflake natively integrates with cloud platforms like AWS, Azure, and GCP, allowing seamless data exchange between Snowflake and other cloud services.
- h. While AWS, Azure, and GCP offer their own data services, integrating them with each other or with external systems may require additional effort and configuration.
- i.

#### **Concurrency and Scalability:**

- j. Snowflake's architecture enables automatic scaling of compute resources and efficient concurrency management, ensuring consistent performance even with varying workloads.
- k. While AWS, Azure, and GCP provide scalability and concurrency features, users may need to manually configure and optimize resources for optimal performance under varying loads.

#### **What is the schema in Snowflake?**

- In Snowflake, a schema is a logical container for database objects such as tables, views, and procedures.
- It helps organize and manage objects within a database by grouping them based on their logical relationships or purposes.
- Schemas provide a way to namespace objects, preventing naming conflicts and facilitating easier management of database structures.
- Users can create multiple schemas within a database to organize and partition their data according to different criteria, such as departments, applications, or data types.
- Schemas are used in SQL queries to qualify object names and specify the context in which the objects are referenced.

### **What kind of SQL does Snowflake use?**

#### **Ansi SQL**

### **What is Snowflake Time Travel?**

- **Data Versioning:** Snowflake automatically maintains versions of data as changes are made to tables. Each time data is modified (e.g., inserted, updated, or deleted), Snowflake retains the previous versions, allowing users to access historical snapshots of the data.
- **Querying Historical Data:** Users can query historical versions of tables using a special timestamp or point-in-time identifier. This enables retrospective analysis, auditing, and debugging of data changes over time.
- **Configurable Retention Period:** Snowflake allows users to configure the retention period for historical data, typically up to 90 days. This means users can access data versions within the specified timeframe.
- **Usage:** Time Travel can be leveraged directly within SQL queries, providing seamless access to historical data without the need for complex backup and restore processes.
- **Granularity:** Time Travel operates at the table level, allowing users to retrieve historical versions of entire tables. It does not provide granularity at the row or column level.

## **What is SnowPipe?**

SnowPipe is a feature in Snowflake that enables automatic and continuous data ingestion from external sources into Snowflake tables. Key points about SnowPipe include:

- **Real-Time Data Ingestion:** SnowPipe automates the process of loading data into Snowflake tables as soon as new data files become available in cloud storage, such as Amazon S3 or Azure Blob Storage. This enables near-real-time data ingestion without manual intervention.
- **Event-Driven Architecture:** SnowPipe operates on an event-driven architecture, where it listens for file upload events in cloud storage locations. When a new file is detected, SnowPipe triggers the ingestion process automatically.
- **Scalability:** SnowPipe leverages Snowflake's scalable architecture to handle large volumes of data efficiently. It dynamically scales resources based on workload demands to ensure fast and reliable data ingestion.
- **Integration:** SnowPipe integrates seamlessly with cloud storage platforms and Snowflake's data loading capabilities. Users can configure SnowPipe pipelines using SQL commands or Snowflake's web interface.
- **Usage:** SnowPipe is commonly used for scenarios where data needs to be ingested into Snowflake continuously, such as streaming data sources, log files, sensor data, and other real-time data streams.
- **Cost-Effective:** SnowPipe follows a pay-as-you-go model, where users are charged based on the amount of data ingested. This makes it a cost-effective solution for organizations needing to process and analyze large volumes of data in real-time.

## **Is Snowflake OLTP or OLAP?**

Snowflake is primarily an OLAP (Online Analytical Processing) platform rather than an OLTP (Online Transaction Processing) system. Key points about Snowflake's OLAP characteristics include:

- **Analytical Workloads:** Snowflake is optimized for running analytical queries on large volumes of data. It supports complex SQL queries, aggregations, joins, and other operations typically associated with analytical processing.

- **Columnar Storage:** Snowflake stores data in a columnar format, which is well-suited for analytics workloads. This storage format enables efficient data compression, faster query performance, and better utilization of computing resources.
- **Scalability:** Snowflake's architecture is designed to scale horizontally, allowing users to scale compute and storage resources independently. This scalability is essential for handling large analytical workloads and accommodating fluctuating query demands.
- **Concurrency:** Snowflake efficiently manages concurrent analytical queries from multiple users or applications. It employs a multi-cluster, shared-nothing architecture to distribute query processing across compute nodes, ensuring consistent performance under heavy loads.
- **Advanced Features:** Snowflake offers a range of advanced features tailored for OLAP, such as time travel for accessing historical data, automatic query optimization, data sharing capabilities, and support for semi-structured data types.

While Snowflake is primarily optimized for OLAP workloads, it can also handle some OLTP-like operations, such as data loading and simple transactional queries. However, organizations typically use Snowflake alongside OLTP systems to offload analytical workloads and provide a dedicated environment for analytics and reporting.

### **How to create a Snowflake task?**

To create a Snowflake task:

- Use the CREATE TASK command in Snowflake SQL.
- Specify the task name, schedule, and SQL statements or stored procedures to execute.
- Optionally, configure parameters such as priority, concurrency, and error handling.
- Assign the task to a specific warehouse for execution.
- Execute the SQL command to create the task.
- Monitor task execution and status in Snowflake's Task History.

### **How is data stored in Snowflake?**

- Data in Snowflake is stored in a columnar format.
- It is organized into micro-partitions, which are immutable, compressed segments of data.
- Micro-partitions are stored in cloud storage, such as Amazon S3 or Azure Blob Storage.
- Snowflake's storage architecture enables efficient storage, retrieval, and processing of data, supporting high-performance analytics and queries.

### **How many editions of Snowflake are available?**

1. Standard Edition: This is the introductory level offering, providing full, unlimited access to all of Snowflake's standard features. .
2. Enterprise Edition: Designed for large-scale enterprises, it includes all the features and services of the Standard Edition, along with additional features tailored to enterprise needs<sup>1</sup>.
3. Business Critical Edition: Formerly known as Enterprise for Sensitive Data (ESD), this edition offers enhanced security and data protection. It's suitable for organizations with extremely sensitive data, especially PHI data that must comply with HIPAA and HITRUST CSF regulations.
4. Virtual Private Snowflake (VPS): This edition provides the highest level of security. It includes all the features of the Business Critical Edition but operates in a completely separate Snowflake environment, isolated from other Snowflake accounts. VPS accounts do not share any resources with non-VPS accounts, ensuring strict data segregation.

### **How do we secure the data in the Snowflake?**

1. Role-Based Access Control (RBAC): Snowflake uses RBAC to control access to data and resources. Administrators can define roles with specific privileges and assign them to users or groups.
2. Encryption: Snowflake encrypts data both at rest and in transit. Data is encrypted using AES-256 encryption algorithms, and SSL/TLS protocols are used for secure communication between clients and Snowflake.
3. Multi-Factor Authentication (MFA): Snowflake supports MFA for additional authentication security. Users can configure MFA using authenticator apps or hardware tokens.



4. **Network Policies:** Administrators can configure network policies to restrict access to Snowflake only from specific IP addresses or virtual private clouds (VPCs).
5. **Data Masking:** Snowflake offers data masking capabilities to obfuscate sensitive data based on user roles or access privileges. This helps protect sensitive information from unauthorized access.
6. **Audit Logging:** Snowflake logs all user activities, including login attempts, query execution, and data access. Administrators can review audit logs to monitor and investigate security incidents.
7. **Advanced Threat Detection:** Snowflake provides built-in threat detection capabilities to identify and alert on suspicious activities, such as unauthorized access attempts or unusual query patterns.
8. **Data Sharing Controls:** When sharing data with external parties using Snowflake's data sharing feature, administrators can define granular access controls to ensure that sensitive data remains protected.
9. **Compliance Certifications:** Snowflake complies with various industry standards and regulations, such as SOC 2, HIPAA, and GDPR, providing assurance of data security and regulatory compliance.

### **What are Micro Partitions?**

- **Immutable Segments:** Micro-partitions are immutable, meaning once they are created, they cannot be modified. Instead, any changes to the data result in the creation of new micro-partitions.
- **Columnar Storage:** Data within micro-partitions is stored in a columnar format, which is optimized for analytical queries. This storage method improves query performance by allowing the system to read only the necessary columns, reducing I/O overhead.
- **Data Compression:** Snowflake applies compression techniques to micro-partitions to minimize storage space and optimize query performance. This compression is achieved by encoding similar values together, resulting in reduced storage requirements.
- **Metadata Management:** Each micro-partition contains metadata that includes statistics and information about the data it stores. This metadata is used by Snowflake's query optimizer to make efficient query execution decisions.
- **Granular Storage Management:** Snowflake dynamically manages the storage of micro-partitions based on data usage patterns and access frequency. It

automatically redistributes and consolidates micro-partitions to optimize storage and query performance.

- **Scalability and Parallelism:** Snowflake's architecture enables parallel processing of queries across multiple micro-partitions, allowing for efficient utilization of computing resources and scalability to handle large datasets and concurrent workloads.

## Snowflake MCQs

### 1. What does Snowflake provide?

- a) Relational Database Management System (RDBMS)
- b) Data warehousing platform
- c) NoSQL database
- d) Big Data analytics platform

### 2. Snowflake architecture is based on which computing model?

- a) Shared-nothing architecture
- b) Shared-everything architecture
- c) Peer-to-peer architecture
- d) Client-server architecture

### 3. What is the primary language used for querying data in Snowflake?

- a) SQL
- b) Python
- c) Java
- d) JavaScript

### 4. Which of the following is true about Snowflake's storage layer?

- a) It uses HDFS for storing data
- b) It utilizes a traditional RDBMS storage engine
- c) It is based on Amazon S3 and Azure Blob Storage
- d) It relies on Google Cloud Storage for data storage

### 5. Snowflake uses a unique architecture for processing queries. What is it called?

- a) Snowball
- b) Snowpipe
- c) Snowcluster
- d) Snowflake

### 6. In Snowflake, what is the unit of compute?

- a) Warehouse
- b) Server
- c) Database
- d) Cluster

**7. Which of the following best describes a Snowflake Warehouse?**

- a) A physical location where Snowflake data centers are housed
- b) A collection of databases in Snowflake
- c) A cluster of virtual machines used for query processing
- d) A type of table used for storing data in Snowflake

**8. What is Snowflake's approach to scaling?**

- a) Vertical scaling
- b) Horizontal scaling
- c) Diagonal scaling
- d) Random scaling

**9. What is a virtual warehouse in Snowflake?**

- a) A place where users can store their virtual machines
- b) A logical collection of resources (compute) available for query processing
- c) A type of storage layer in Snowflake
- d) A method of organizing database objects in Snowflake

**10. Which feature of Snowflake enables automatic scaling of compute resources based on workload?**

- a) Auto-resize
- b) Auto-extend
- c) Auto-scale
- d) Auto-compute

**11. What is the role of a Snowpipe in Snowflake?**

- a) Snowpipe is used for data ingestion into Snowflake in real-time.
- b) Snowpipe is a tool for modeling data in Snowflake.
- c) Snowpipe is a security feature in Snowflake.
- d) Snowpipe is used for data export from Snowflake.

**12. Snowflake supports semi-structured data formats such as:**

- a) JSON
- b) XML
- c) Parquet
- d) All of the above

**13. How does Snowflake handle concurrency?**

- a) Snowflake allows only one query to run at a time.
- b) Snowflake processes queries in a first-come, first-served manner.
- c) Snowflake dynamically allocates resources to multiple concurrent queries.
- d) Snowflake requires manual intervention to manage concurrency.

**Or**

- A) By limiting the number of concurrent users
- B) By using multiversion concurrency control (MVCC)
- C) By restricting access to the data warehouse during peak times
- D) By reducing the size of data warehouses

**14. Snowflake encrypts data using which encryption standard?**

- a) AES
- b) RSA
- c) SHA
- d) MD5

**15. What is a Snowflake Role?**

- a) A role that determines the schema of the database.
- b) A role that grants permissions to users.
- c) A role that defines the data types used in Snowflake.
- d) A role that specifies the storage location of data.

**16. Snowflake supports which of the following programming languages for UDFs (User Defined Functions)?**

- a) Python
- b) Java
- c) JavaScript
- d) All of the above

**17. What is the maximum retention period for data in Snowflake without querying?**

- a) 1 month
- b) 3 months
- c) 6 months
- d) 1 year

**18. What feature in Snowflake allows users to query data directly from external cloud storage?**

- a) External Tables
- b) Snowpipe
- c) Virtual Warehouses
- d) Data Sharing

**19. Which SQL command is used to create a database in Snowflake?**

- a) CREATE DATABASE
- b) ADD DATABASE
- c) MAKE DATABASE
- d) SETUP DATABASE

**20. Which of the following statements about Snowflake is true?**

- a) Snowflake is an open-source database.
- b) Snowflake is a columnar database.
- c) Snowflake is optimized for OLTP workloads.
- d) Snowflake is an in-memory database.

**21. What is the default replication factor for Snowflake data?**

- a) 1
- b) 2
- c) 3
- d) 4

**22. Which cloud providers does Snowflake support?**

- a) AWS and Azure
- b) AWS only
- c) Azure only
- d) Google Cloud only

**23. Which of the following is not a valid Snowflake edition?**

- a) Standard Edition
- b) Enterprise Edition
- c) Community Edition
- d) Professional Edition

**24. Snowflake charges users based on:**

- a) Data storage only
- b) Query execution time only
- c) Both data storage and compute usage
- d) Data transfer only

**25. Which feature of Snowflake allows users to share data securely across different accounts?**

- a) Virtual Warehouses
- b) Data Pipelines
- c) Data Sharing
- d) External Tables

**26. What is Snowflake's approach to data loading?**

- a) Bulk loading only
- b) Incremental loading only
- c) Both bulk and incremental loading
- d) Streaming data loading

**27. How does Snowflake ensure data durability?**

- a) By replicating data across multiple data centers
- b) By compressing data before storage
- c) By partitioning data based on usage
- d) By encrypting data at rest

**28. Which of the following is not a valid Snowflake object type?**

- a) Table
- b) View
- c) Function
- d) Class

**29. What is the maximum size for a single warehouse in Snowflake?**

- a) 1 node
- b) 64 nodes
- c) 128 nodes
- d) 256 nodes

**30. What is the primary benefit of Snowflake's multi-cluster architecture?**

- a) Improved performance and concurrency
- b) Reduced storage costs
- c) Easier management of data pipelines
- d) Enhanced security and compliance

**31. What type of database is Snowflake?**

- A) Relational Database
- B) NoSQL Database
- C) Columnar Database
- D) Graph Database

**32. In Snowflake, what does a warehouse represent?**

- A) A physical storage location for data
- B) A processing unit for executing queries
- C) A virtual machine instance
- D) A data table

**33. What is the main benefit of Snowflake's architecture?**

- A) It uses a master-slave architecture for high availability.
- B) It separates storage and compute, allowing them to scale independently.
- C) It employs in-memory processing for faster query performance.
- D) It offers a built-in graph database for complex relationships.

**34. Which feature of Snowflake enables automatic scaling of compute resources based on workload?**

- A) Auto-Optimization
- B) Auto-Scaling
- C) Auto-Tuning
- D) Auto-Partitioning

**35. What does Snowflake's Time Travel feature allow users to do?**

- A) Travel through time within the Snowflake interface
- B) Roll back the database to a previous state
- C) Schedule queries to run at specific times
- D) Analyze historical data trends

**36. Which security measure does Snowflake use to protect data?**

- A) Role-based access control (RBAC)
- B) Data masking
- C) Encryption at rest and in transit
- D) All of the above

**37. What is Snowflake's data sharing feature primarily used for?**

- A) Sharing data between different Snowflake accounts
- B) Exporting data to external storage systems
- C) Collaborating on data analysis projects
- D) Creating backups of data

**38. What does Snowflake's "Zero-Copy Cloning" feature allow users to do?**

- A) Create exact copies of data without using additional storage
- B) Clone data with minimal downtime
- C) Share data without making physical copies
- D) Encrypt data without impacting performance

**39. Which of the following is NOT a component of Snowflake's architecture?**

- A) Compute
- B) Storage
- C) Networking
- D) Visualization

**40. Which of the following best describes Snowflake's pricing model?**

- A) Pay-per-use
- B) Flat monthly subscription
- C) Pay-per-query
- D) Free, with optional paid features



**41. Which command is used to create a new database in Snowflake?**

- A) CREATE DATABASE
- B) NEW DATABASE
- C) ADD DATABASE
- D) MAKE DATABASE

**42. Which command is used to unload data from Snowflake to an external stage?**

- A) UNLOAD
- B) EXPORT
- C) EXTRACT
- D) OUTLOAD

**43. What is Snowflake's native data format for semi-structured data?**

- A) JSON
- B) XML
- C) Parquet
- D) Avro

**44. Which of the following is NOT a benefit of using Snowflake?**

- A) Reduced infrastructure management overhead
- B) Improved query performance
- C) Compatibility with legacy database systems
- D) Scalability to handle large volumes of data

**45. Which statement best describes Snowflake's approach to data replication?**

- A) Snowflake automatically replicates data across multiple regions for fault tolerance.
- B) Snowflake requires users to manually replicate data to ensure availability.
- C) Snowflake replicates data only upon user request.
- D) Snowflake does not support data replication.

**46. Which Snowflake feature allows users to create and manage scheduled tasks?**

- A) SnowSQL
- B) SnowPipe
- C) SnowScheduler
- D) SnowJob

**47. What is the purpose of Snowflake's Materialized Views?**

- A) To improve query performance by precomputing and storing results
- B) To visualize data in graphical format
- C) To enforce referential integrity constraints
- D) To encrypt sensitive data

**48. Which Snowflake component is responsible for managing user sessions and queries?**

- A) Storage
- B) Metadata
- C) Virtual Warehouse
- D) Compute

**49. Which Snowflake feature allows users to create custom user-defined functions (UDFs)?**

- A) SnowSQL
- B) SnowPipe
- C) SnowPack
- D) SnowUDF

**50. Which feature of Snowflake enables users to load data continuously from external sources?**

- A) SnowSQL
- B) SnowPipe
- C) SnowLoader
- D) SnowConnector

**51. Which statement best describes Snowflake's approach to data loading?**

- A) Data loading must be scheduled during off-peak hours.
- B) Data loading is performed manually by users.
- C) Data loading is performed automatically and incrementally.
- D) Data loading requires custom scripts for each data source

**52. Which of the following is a limitation of Snowflake?**

- A) Limited support for SQL queries
- B) Inability to scale compute resources
- C) Dependency on specific hardware configurations
- D) Potential for increased query latency during peak usage

**53. What is the purpose of Snowflake's Time Travel feature?**

- A) To rewind time and undo data changes
- B) To monitor the time taken by queries
- C) To schedule tasks at specific times
- D) To visualize data changes over time

**54. Which command is used to grant privileges to a user or role in Snowflake?**

- A) GRANT PRIVILEGE
- B) ADD PRIVILEGE
- C) GRANT ROLE
- D) ASSIGN PRIVILEGE

**55. Which feature of Snowflake allows users to create and manage multiple virtual warehouses?**

- A) SnowSQL
- B) SnowPipe
- C) SnowPark
- D) SnowWarehouses

**56. What is Snowflake's default data retention period for deleted or dropped tables?**

- A) 7 days
- B) 30 days
- C) 60 days
- D) 90 days

**57. How does Snowflake ensure data durability?**

- A) By replicating data across multiple data centers
- B) By compressing data to reduce storage requirements
- C) By automatically archiving old data
- D) By deleting unnecessary data regularly

## Answers for MCQs

1. b) Data warehousing platform
2. a) Shared-nothing architecture
3. a) SQL
4. c) It is based on Amazon S3 and Azure Blob Storage
5. d) Snowflake
6. a) Warehouse
7. c) A cluster of virtual machines used for query processing
8. b) Horizontal scaling
9. b) A logical collection of resources (compute) available for query processing
10. c) Auto-scale
11. a) Snowpipe is used for data ingestion into Snowflake in real-time.
12. d) All of the above
13. c) Snowflake dynamically allocates resources to multiple concurrent queries.
14. a) AES
15. b) A role that grants permissions to users.
16. d) All of the above
17. b) 3 months
18. a) External Tables
19. a) CREATE DATABASE

- 20. b) Snowflake is a columnar database.
- 21. c) 3
- 22. a) AWS and Azure
- 23. c) Community Edition
- 24. c) Both data storage and compute usage
- 25. c) Data Sharing
- 26. c) Both bulk and incremental loading
- 27. a) By replicating data across multiple data centers
- 28. d) Class
- 29. b) 64 nodes
- 30. a) Improved performance and concurrency
- 31. a) Relational Database
- 32. b) A processing unit for executing queries
- 33. b) It separates storage and compute, allowing them to scale independently.
- 34. b) Auto-Scaling
- 35. b) Roll back the database to a previous state
- 36. d) All of the above
- 37. a) Sharing data between different Snowflake accounts
- 38. a) Create exact copies of data without using additional storage
- 39. d) Visualization
- 40. a) Pay-per-use
- 41. a) CREATE DATABASE
- 42. a) UNLOAD
- 43. a) JSON
- 44. c) Compatibility with legacy database systems
- 45. a) Snowflake automatically replicates data across multiple regions for fault tolerance.
- 46. c) SnowScheduler
- 47. a) To improve query performance by precomputing and storing results
- 48. b) Metadata
- 49. d) SnowUDF
- 50. b) SnowPipe
- 51. c) Data loading is performed automatically and incrementally.
- 52. d) Potential for increased query latency during peak usage
- 53. a) To rewind time and undo data changes
- 54. a) GRANT PRIVILEGE
- 55. d) SnowWarehouses
- 56. d) 90 days
- 57. a) By replicating data across multiple data centers