Time left 0:32:02

Question 1

Not yet answered

Marked out of 1.00

1. What is Snowflake, and how is it different from traditional data warehouses?

- a. A data lake tool for unstructured data only.
- b. A NoSQL platform with no SQL support and basic security.
- c. A cloud-native, SaaS data warehouse that decouples compute and storage, offers independent auto-scaling, supports semi-structured data, and follows pay-per-use pricing.
- d. An on-premises SQL engine with fixed resources and manual scaling.

Clear my choice

Question 2

Not yet answered

Marked out of 1.00

2. What are the advantages and disadvantages of Snowflake?

- a. Lower cost, automatic tuning; but no cloud deployment and rigid server resources.
- b. Free for unlimited use; can't handle semi-structured data.
- c. Easy SaaS setup, decoupled scaling, strong security; but uncertain costs, limited unstructured support, and vendor lock-in.
- d. Requires heavy DBA tuning; fully supports unstructured data.

Clear my choice

Question 3

Not yet answered

Marked out of 1.00

3. Explain Snowflake's architecture. How is it decoupled?

- a. Uses Hadoop for compute and local disks for storage.
- b. Single monolithic engine for compute and storage.
- c. Compute and storage are tightly integrated on local servers.
- d. Three-layer architecture (Cloud services, Compute, Storage) where storage in cloud is separate from virtual warehouses for compute, enabling non-disruptive, independent scaling.

Clear my choice

Question 4

Not yet answered

Marked out of 1.00

4. What is the difference between a data warehouse, a DataMart, and a database?

- a. All are identical terms describing structured storage.
- b. Data warehouse is for OLTP; database for OLAP; DataMart is unstructured.
- c. A database stores raw data; a DataMart is a business-unit–focused subset; a data warehouse integrates data from multiple sources for enterprise analytics.
- d. DataMart is larger than data warehouse, database is cloud-based only.

Clear my choice

Question 5

Not yet answered

Marked out of 1.00

5. What are micro-partitions? How do they impact performance?

- a. Temporary in-memory caches only.
- b. Manual heap segments with no metadata.
- c. Immutable ~16 MB compressed files with automatic metadata (min/max etc.) that enable pruning and fast, efficient scans.
- d. Small user-defined partitions that slow down queries.

Clear my choice

Question 6

Not yet answered

Marked out of 1.00

6. What techniques do you use to optimize existing queries?

- a. Rewrite queries, add filters to prune partitions, size the warehouse properly, use clustering, leverage result caching.
- b. Ignore performance; let Snowflake handle it.
- c. Only rewrite entire database schemas.
- d. Use manual indexing and triggers.

Clear my choice

Question 7

Not yet answered

Marked out of 1.00

7. What is zero-copy cloning in Snowflake? Where have you used it?

- a. A compression technique.
- b. A backup that needs full copy.
- c. Metadata-only copy of a table, sharing micro-partitions until changes are made; used for dev/testing environments without extra storage cost.
- d. Full physical duplication of tables using extra storage.

Clear my choice

Question 8

Not yet answered

Marked out of 1.00

8. What's the difference between masking policies and row access policies?

- a. Only masking works in BI tools.
- b. Masking is for rows, row policies for columns.
- c. Both do the same thing.
- d. Masking policies obfuscate sensitive column values; row access policies filter rows returned based on user context.

Clear my choice

Question 9

Not yet answered

Marked out of 1.00

9. Example file types for structured and unstructured data. Do relational DBs/Snowflake support unstructured data?

- a. Structured: PDF; Unstructured: CSV.
- b. Structured: JSON/CSV; unstructured: images/text blobs. Snowflake supports structured and semi-structured (JSON, Parquet), but not traditional unstructured like images.
- c. Structured: CSV, JSON; Unstructured: PDF, image. Relational DBs, including Snowflake, do not support unstructured data.
- d. No difference—everything is structured.

Clear my choice

Question 10

Not yet answered

Marked out of 1.00

10. What is automatic clustering vs manual clustering in Snowflake?

- a. Clustering isn't available in Snowflake.
- b. Both are the same process.
- c. Manual clustering uses defined clustering keys to reorganize micro-partitions; automatic clustering is a managed background process doing it for you.
- d. Only manual clustering exists.

Clear my choice

Question 11

Not yet answered

Marked out of 1.00

11. What are the different types of caching in Snowflake? Explain Result Caching.

- a. There is no caching.
- b. Only operating system cache.
- c. Caching happens only in client tools.
- d. Includes result cache (global), metadata cache, and local SSD cache in compute nodes. The result cache returns identical queries instantly without compute.

Clear my choice

Question 12

Not yet answered

Marked out of 1.00

12. When would you use Time Travel in real-time scenarios?

- a. To restore accidentally deleted or updated data, compare historical data, or recreate production schema.
- b. Never—Time Travel is deprecated.
- c. Only for backups.
- d. Only internally at Snowflake.

Clear my choice

Question 13

Not yet answered

Marked out of 1.00

13. What is the use of creating views? When would you create a view?

- a. Views slow down performance; never use them.
- b. Only necessary for BI tools that don't support SQL.
- c. Views duplicate data physically.
- d. To simplify complex queries, encapsulate logic, abstract underlying schema, and provide controlled access to data.

Clear my choice

Question 14

Not yet answered

Marked out of 1.00

14. What are the various SQL joins? Write a query using INNER JOIN.

- a. Only CROSS JOIN is supported.
- b. Joins are not used in Snowflake.
- c. INNER, LEFT, RIGHT, FULL, CROSS, and SELF joins.
- d. Only INNER and OUTER joins exist.

Clear my choice

Question 15

Not yet answered

Marked out of 1.00

15. What is the difference between WHERE and HAVING?

- a. They're interchangeable.
- b. WHERE filters individual rows before grouping; HAVING filters group results after aggregation.
- c. WHERE is for numeric, HAVING for text.
- d. Only WHERE works in Snowflake.

Clear my choice

Question 16

Not yet answered

Marked out of 1.00

16. Write a query using ORDER BY, GROUP BY, HAVING.

- a. Not possible in SQL.
- b. Only ORDER BY exists.
- c. SELECT dept, COUNT() AS cnt FROM employees GROUP BY dept HAVING COUNT() > 10 ORDER BY cnt DESC;
- d. Syntax is reversed.

Clear my choice

Question 17

Not yet answered

Marked out of 1.00

17. When use TRUNCATE instead of DELETE in Snowflake?

- a. TRUNCATE deletes table schema too.
- b. Use TRUNCATE for fast, full-table deletes when no WHERE clause is needed—it's faster and uses fewer micro-partitions.
- c. DELETE is always better.
- d. TRUNCATE is slower.

Clear my choice

Question 18

Not yet answered

Marked out of 1.00

18. How to query count of unique records?

- a. SELECT COUNT(*) ... is enough.
- b. Deduplication not possible.
- c. Use temporary tables only.
- d. SELECT COUNT(DISTINCT column_name) FROM table;

Clear my choice

Question 19

Not yet answered

Marked out of 1.00

19. Difference between ROW_NUMBER, RANK, and DENSE_RANK?

- a. ROW_NUMBER gives a unique sequence to rows; RANK leaves gaps on ties; DENSE_RANK gives no gaps after ties.
- b. DENSE_RANK is deprecated.
- c. All return row counts.
- d. Same function.

Clear my choice

Question 20

Not yet answered

Marked out of 1.00

20. Can we define auto-increment ID in Snowflake?

- a. Use triggers only.
- b. No auto-increment support.
- c. No auto-increment support. Yes, using IDENTITY or sequences
- d. IDs must be manually assigned.

Clear my choice

Question 21

Not yet answered

Marked out of 1.00

21. Does primary key allow duplicate/null in Snowflake? How prevent null values?

- a. PKs enforce duplicates and nulls by default.
- b. PK automatically prevents nulls.
- c. Snowflake primary keys are informational only and don't enforce uniqueness or null restrictions. Prevent NULLs by using NOT NULL constraint.
- d. Snowflake doesn't support constraints.

Clear my choice

Question 22

Not yet answered

Marked out of 1.00

22. Query to retrieve unique records from a table with duplicates?

- a. SELECT * FROM (SELECT *, ROW_NUMBER() OVER (PARTITION BY col1, col2 ORDER BY col3) AS rn FROM my_table) t WHERE rn = 1;
- b. Use DELETE only.
- c. SELECT DISTINCT * FROM my_table;
- d. Not possible.

Clear my choice

Question 23

Not yet answered

Marked out of 1.00

23. How recover original data after a mistaken update?

- a. Use flashback log.
- b. Use Time Travel.
- c. Impossible.
- d. Only restore from backup.

Clear my choice

Question 24

Not yet answered

Marked out of 1.00

24. Correct the error in this query:

```
SELECT salary * 0.10 AS bonus
FROM employees
WHERE bonus > 10000;
```

- a. Move the filter into HAVING or subquery.
- b. Only this.
- c. SELECT *, salary * 0.10 AS bonus FROM employees WHERE salary * 0.10 > 10000;
- d. Not possible.

Clear my choice

Question 25

Not yet answered

Marked out of 1.00

25. Types of tables in Snowflake? Create a transient table.

- a. Only temporary tables.
- b. Only permanent tables.
- c. Tables are always external.
- d. Permanent, Temporary, Transient, External tables.

Clear my choice

Question 26

Not yet answered

Marked out of 1.00

26. What is the difference between tJoin and tMap components?

- a. tMap supports multiple outputs, expressions, lookup memory options; tJoin is basic
- b. tJoin lets multiple lookups; tMap only one
- c. tJoin supports expressions; tMap only exact match
- d. Both are identical

Clear my choice

Question 27

Not yet answered

Marked out of 1.00

27. What is a joblet in Talend and when is it useful?

- a. A reusable sub-job used to modularize common logic
- b. A type of job running in the cloud
- c. A mapping component replacement
- d. A compiled version of the job

Clear my choice

Question 28

Not yet answered

Marked out of 1.00

28. In Talend, what is the main distinction between ETL and ELT processes?

- a. ETL is faster than ELT.
- b. ETL extracts data, loads it into a staging area, and then transforms it; ELT extracts data, transforms it, and then loads it into the target.
- c. ELT is used for batch processing, while ETL is used for real-time processing.
- d. There is no difference; both terms are interchangeable.

Clear my choice

Question 29

Not yet answered

Marked out of 1.00

29. What is the purpose of routines in Talend?

- a. To store frequently used pieces of code for reuse across multiple jobs.
- b. To define the structure of data.
- c. To monitor job execution.
- d. To schedule jobs.

Clear my choice

Question 30

Not yet answered

Marked out of 1.00

30. Difference between tAggregateRow and tAggregateSortedRow components?

- a. tAggregateSortedRow is deprecated
- b. tAggregateSortedRow requires pre-sorted input and known row count; tAggregateRow handles unsorted data dynamically
- c. tAggregateRow requires sorted input; tAggregateSortedRow works on unsorted
- d. Both are the same

Clear my choice

Question 31

Not yet answered

Marked out of 1.00

31. How do you perform incremental data loading in Talend?

- a. Always use full-load with tMap
- b. Use tFileInputDelimited only
- c. Use tBulkExec for full reloads
- d. Use tCDCInput or a lookup/timestamp filter strategy

Clear my choice

Question 32

Not yet answered

Marked out of 1.00

32. Difference between tParallelize and multi-threading in Talend?

- a. tParallelize manages parallel subprocess flows; multi-threading uses JVM-level threads keyed by component properties
- b. They're identical
- c. Multi-threading doesn't exist in Talend
- d. tParallelize is deprecated

Clear my choice

Question 33

Not yet answered

Marked out of 1.00

33 . Which Talend component is used to handle errors and warnings during job execution?

- a. tFileInputDelimited
- b. tLogCatcher
- c. tMap
- d. tFileOutputDelimited

Clear my choice

Question 34

Not yet answered

Marked out of 1.00

34. What is the purpose of the tParallelize component in Talend?

- a. To execute multiple sub-jobs in parallel, improving performance.
- b. To execute multiple sub-jobs sequentially.
- c. To handle errors in sub-jobs.
- d. To transform data.

Clear my choice

Question 35

Not yet answered

Marked out of 1.00

35. What are context variables in Talend?

- a. Global placeholders for environment-specific values (DB URL, credentials)
- b. Variables defined in tMap only
- c. Variables only used in joblets
- d. Java system properties

Clear my choice

Question 36

Not yet answered

Marked out of 1.00

36. What is the function of the tNormalize component in Talend?

- a. To merge multiple rows into a single row.
- b. To split a single column into multiple rows.
- c. To filter data based on conditions.
- d. To convert data from a normalized form to a denormalized form.

Clear my choice

Question 37

Not yet answered

Marked out of 1.00

37. Integer to string conversion for loading?

- a. In tMap use String.valueOf(inputColumn)
- b. Not possible
- c. Use tConvertType
- d. It occurs automatically

Clear my choice

Question 38

Not yet answered

Marked out of 1.00

38. Which Talend component is used to handle dynamic schemas, allowing for columns to be added or removed at runtime?

- a. tMap
- b. tFileInputDelimited
- c. tFileOutputDelimited
- d. tDynamic

Clear my choice

Question 39

Not yet answered

Marked out of 1.00

39. What is the purpose of the tSchemaComplianceCheck component in Talend?

- a. To validate data quality by checking if input data complies with a reference schema.
- b. To execute sub-jobs in parallel.
- c. To handle errors during job execution.
- d. To transform data.

Clear my choice

Question 40

Not yet answered

Marked out of 1.00

40. What are slowly changing dimensions?

- a. Regular tables
- b. Data warehouse concept for managing attribute changes over time (e.g., SCD Type 1/2/3)
- c. Performance tuning concept
- d. Dimensions updated only weekly

Clear my choice

Question 41

Not yet answered

Marked out of 1.00

41. What is the role of Talend's Administration Center (TAC)?

- a. To handle data transformation.
- b. To monitor and manage job execution and scheduling.
- c. To design and develop jobs.
- d. To store context variables.

Clear my choice

Question 42

Not yet answered

Marked out of 1.00

42. Different ways to trigger a Talend job?

- a. Use only tREST
- b. CLI/shell script, TMC scheduling/webhook, tREST/tFileTrigger, API calls
- c. Automatically on publish
- d. Only manual

Clear my choice

Question 43

Not yet answered

Marked out of 1.00

43. Use of tWarn & tDie components?

- a. tWarn sends email
- b. Both stop job
- c. Deprecated
- d. tWarn logs a warning and continues; tDie logs an error and stops the job

Clear my choice

Question 44

Not yet answered

Marked out of 1.00

44. Significance of Talend's Global Map?

- a. Used in tMap only
- b. Not used
- c. Replaced by context variables
- d. Stores values accessible across components within a job—use for sharing calculations, flags, counters

Clear my choice

Question 45

Not yet answered

Marked out of 1.00

45. What is an expression filter in tMap?

- a. A boolean expression to route records within tMap, enabling conditional flows
- b. Deprecated
- c. A filter on input schema
- d. For debugging only

Clear my choice

Question 46

Not yet answered

Marked out of 1.00

46. Use of tFlowToIterate?

- a. Converts main flow data into iterable globalMap variables—useful for looping dynamic jobs/subjobs
- b. Only for joblets
- c. Converts string to integer
- d. Merges flows

Clear my choice

Question 47

Not yet answered

Marked out of 1.00

47. Purpose of tSchemaComplianceCheck?

- a. Checks joblet compliance
- b. Checks performance
- c. Deprecated
- d. Validates incoming data matches schema; routes non-compliant rows to reject flow

Clear my choice

Question 48

Not yet answered

Marked out of 1.00

48. Replace nulls with default values?

- a. NVL() in tMap
- b. Both B & C
- c. Use tReplace
- d. In tMap use row.value != null ? row.value : default or StringHandling.IFNULL()

Clear my choice

Question 49

Not yet answered

Marked out of 1.00

49. Load records in batches of 1000 to DB?

- a. Use external DB script
- b. Use tLoop
- c. Use tBatch
- d. Configure “Commit every 1000” in tDBOutput

Clear my choice

Question 50

Not yet answered

Marked out of 1.00

50. Remove leading/trailing whitespaces?

- a. Both A & B
- b. In tMap use StringHandling.LTRIM(RTRIM(row.value))
- c. Use tTrim
- d. tClean

Clear my choice