Question 9: Which of the following guidelines should be followed when selecting an OLAP system?

- A) It should only support single-user access.
- B) It should allow dynamic sparse matrix handling.
- C) It should prioritize real-time data processing over analytical capabilities.
- D) It should have a high level of data redundancy.

Answer: B) It should allow dynamic sparse matrix handling.

Question 13: What type of dimension contains attributes that change slowly over time?

- A) Rapidly Changing Dimension
- B) Junk Dimension
- C) Conformed Dimension
- D) Slowly Changing Dimension

Question 15: What is the main purpose of an Enterprise Data Warehouse (EDW)?

- A) To store real-time transactional data
- B) To provide a centralized and unified data repository for the entire organization
- C) To store data for a specific department only
- D) To perform batch processing of transactional data

Question 16: What is the primary characteristic of a data mart?

- A) It stores data from all departments of a company.
- B) It is a subset of data warehouse tailored for specific user groups or departments.
- C) It is mainly used for real-time data analytics.
- D) It captures unstructured data directly from operational systems.

Question 17: Which of the following statements is true about the bottom-up approach in data warehouse architecture?

- A) Data warehouses are built before data marts.
- B) It is faster and less costly to implement than the top-down approach.
- C) It requires a centralized data repository first.
- D) It always uses the star schema.

Answer: B) It is faster and less costly to implement than the top-down approach.

Question 18: In the context of data warehousing, what is data purging?

- A) Deleting data temporarily
- B) Removing and permanently deleting data from storage
- C) Compressing data to save space
- D) Archiving data for future use

Answer: B) Removing and permanently deleting data from storage

Question 19: What is the main benefit of a cloud-based data warehouse?

- A) It reduces the need for data modeling.
- B) It provides enhanced data security and disaster recovery options.
- C) It always runs on-premises hardware.
- D) It requires no initial setup cost.

Question 20: Which of the following best describes a data cube in data warehousing?

- A) A flat table with one dimension
- B) A multidimensional model that stores aggregated data for OLAP analysis
- C) A schema with normalized dimension tables
- D) A type of transactional table

More Complex Question 13

What is a factless fact table in a data warehouse?

- A) A fact table that contains only aggregated data without any measurable facts
- B) A fact table that contains no measures but tracks events or coverage
- C) A fact table that has no associated dimension tables
- D) A fact table that only includes dimensions but no facts

The correct answer is **B**) A fact table that contains no measures but tracks events or coverage.

A factless fact table records the occurrence of events or conditions, but does not contain any quantitative measures. It is used to track and analyze occurrences of events, such as attendance at events or the presence of certain conditions, without having numeric values to aggregate.

In a data warehouse, what is the purpose of an OLAP cube?

- A) To store and manage transactional data
- B) To provide a multidimensional view of data for complex queries and analysis
- C) To integrate data from various sources into a single table
- D) To perform ETL processes and data transformation

Correct! **B)** To provide a multidimensional view of data for complex queries and analysis is the purpose of an OLAP (Online Analytical Processing) cube. OLAP cubes allow users to perform complex queries and analysis by slicing and dicing data across multiple dimensions.

What is a data mart, and how does it differ from a data warehouse?

- A) A data mart is a smaller, more focused subset of a data warehouse tailored to a specific business area or department
- B) A data mart is a larger, comprehensive repository of all organizational data
- C) A data mart is used for storing metadata about the data warehouse

Actually, the correct answer is A) A data mart is a smaller, more f

In a data warehouse, what is a materialized view?

- A) A view that dynamically fetches data from the underlying tables
- B) A stored query that precomputes and stores the results to improve query performance
- C) A temporary table used for intermediate processing during ETL
- D) A view that only stores metadata about the data warehouse schema

Actually, the correct answer is **B**) **A stored query that precomputes and stores the results to improve query performance**.

Helps you save time:

- Enhances the quality of data:
- Enhances Business Intelligence (BI):
- Data standardization and Consistency are achieved: