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Naan mudhalvan Bigdata home work- 7

1.##What is a data warehouse?

List the types of Data warehouse architectures. A data warehouse architecture is a method of defining the overall architecture of Data communication processing and presentation that exist for end-clients computing within the enterprise. Each data warehouse is different, but all are characterized by standard vital components.

Types of Data Warehouse Architecture :

Single-tier architecture, which aims to deduplicate data to minimize the amount of stored data. Three-tier architecture. Data Warehouse Database. Extraction,Transformation,and Loading Tools (ETL) Metadata. Data Warehouse Access Tools.

2.##What does OLAP stand for?
Online analytical processing (OLAP) is a system for performing multidimensional analysis At high speeds on large volumes of data.Typically, this data is from a data warehouse, Data mart or some other centralized data store.

3.##What does OLTP stand for?

OLTP (online transaction processing) is a class of software programs capable of supporting transaction-oriented applications. In computing, a transaction is a sequence of discrete information exchanges that are treated as a unit.

4.##What is a star schema?
A star schema is a database organizational structure optimized for use in a data warehouse or business intelligence That uses a single large fact table to store transactional or measured data, and one or more smaller dimensional tables that store attributes about the data.

5.##What is a snow flake schema?

A snowflake schema is a multi-dimensional data model that is an extension of a star schema, where dimension tables are broken down into subdimensions. Snowflake schemas are commonly used for business intelligence and reporting in OLAP data

6.##Define fact-less fact.

Factless facts are those fact tables that have no measures associated with the transaction. Factless facts are a simple collection of dimensional keys which define the transactions or describing condition for the time period of the fact

7.##What do you understand by dimensional modeling?

Data Dimensional Modelling (DDM) is a technique that uses Dimensions and Facts to store the data in a Data Warehouse efficiently. It optimises the database for faster retrieval of the data. Dimensional Models have a specific structure and organise the data to generate reports that improve performance.

8.##What is a data mart?

A data mart is a structure / access pattern specific to data warehouse environments, used to retrieve client-facing data. Data mart is a subset of the data warehouse and is usually oriented to a specific business line or team