

211720243040

***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 multi-dimensional 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 warehouses, data marts, and relational databases.*

**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.***