

**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.***