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Homework 7

Q1. What is a data warehouse? List the types of Data warehouse architectures.

A Data Warehouse is defined as a central repository where information is coming from one or more data sources. The types of Data warehouse architecture are,

> Single-tier data warehouse

> Two-tier data warehouse

> Three-tier data warehouse

Q2. What does OLAP stand for?

Online Analytical Processing (OLAP) is a system for performing multi-dimensional analysis at high speed on large amount of data. Generally, this data is from a data warehouse, data mart or any other centralized data store.qlap is a ideal for data mining,business calculation,as well as business reporting functions like financial analysis,budgeting and scales forecasting

Q3. What does OLTP stand for?

Online Transactional Processing is a system programming multi-dimensional analysis at high speed on large volumes of data. OLTP systems are responsible for our everyday transactions from ATMs to in-store purchases. OLTP uses a relational database.

Q4. What is a star schema?

Star schema is a fundamental scheme among the data mart scheme and it simplest.It is a database organizational structure optimized for use in a data warehouse 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.

Q5. What is a snow flake schema?

A snowflake schema is a variant of the star scheme multi-dimensional data model which is an extension of a star schema where dimension tables are broken down into sub-dimensions. Snowflake schemas are commonly used for business intelligence and

reporting in OLAP data warehouses, data marts, and relational databases.

Q6. Define fact-less fact.

A fact-less fact is a fact table that have no measures associated with the transaction.factless facts are simple collection of dimensional keys which define the transactions or describing condition for the time period of the fact.

Q7. What do you understand by dimensional modeling?

Dimensional modeling is The purpose of dimensional modeling is to optimize the database for faster retrieval of data. In dimensional modeling, the transaction record is divided into either "facts," which are frequently numerical transaction data, or "dimensions," which are the reference information that gives context to the facts.

Q8. What is a data mart?

Data mart is a structure access pattern specific specific data used to retrieve client facing data simple form of a data warehouse that is focused on a single subject or line of business, such as finance or marketing. Data mart make specific data available to the respecetd group of users which allows them to quickly access critical analytics without wasting time for searching through an entire data warehouse.