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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 speed 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 snowflake schema?

Asnowflakeschemaisamulti-dimensionaldatamodelthatisan extensionofastarschema,wheredimensiontablesarebrokendowninto subdimensions.

Snowflakeschemasarecommonlyusedforbusinessintelligenceand reportinginOLAPdatawarehouses,datamarts,andrelationaldatabases.

6.##Definefact-lessfact.

Factlessfactsarethosefacttablesthathavenomeasures associatedwiththetransaction.

Factlessfactsareasimplecollectionofdimensionalkeyswhichdefinethe transactionsordescribingconditionforthetimeperiodofthefact.

7.##Whatdoyouunderstandbydimensionalmodeling?

DataDimensionalModelling(DDM)isatechniquethatuses DimensionsandFactstostorethedatainaDataWarehouseefficiently.

It optimisesthedatabaseforfasterretrievalofthedata.Dimensional Modelshaveaspecificstructureandorganisethedatatogeneratereports thatimproveperformance.

8.##Whatisadatamart?

A datamartisastructure/accesspatternspecifictodata warehouseenvironments,usedtoretrieveclient-facingdata.

Datamart is a subset of the data warehouse and is usually oriented to a specific business line or team.