

WORKSHEET 1 SQL

Answers: -

1. A) Create & D) Alter
2. A) Update & B) Delete
3. B) Structured Query Language
4. B) Data Definition Language
5. A) Data Manipulation Language
6. C) Create Table A (B int,C float)
7. B) Alter Table A ADD COLUMN D float
8. B) Alter Table A Drop Column D
9. D) Alter table A Column D float to int
10. C) Alter Table A Add Primary key B

11. A data warehouse is a central location where data is stored and optimized for analysis. This type of storage is commonly used in business intelligence, allowing for more informed decisions through reporting, analytics, and data mining. The data in a warehouse is often collected from different sources and standardized before being loaded in. This process is referred to as ETL (extract, transform, load). Data warehouses are valuable tools for understanding business operations and making data-driven decisions.

12. OLTP (Online Transaction Processing) and OLAP (Online Analytical Processing) are used for:

OLTP is used for managing and storing daily transactions.

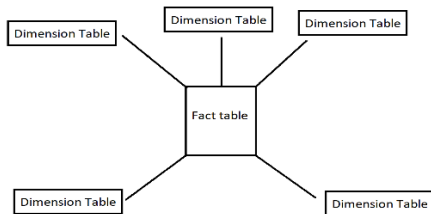
OLAP is used for analyzing and making decisions based on that data.

In summary, OLTP is used for day-to-day operations, while OLAP is used for business intelligence and decision-making.

13. There are several characteristics of a data warehouse, including:

- i. Subject-oriented: data is organized and stored according to specific subjects, such as sales or inventory.
- ii. Integrated: data is consolidated from multiple, disparate sources, and is made consistent and coherent.
- iii. Non-volatile: data in the data warehouse does not change, once it is entered, it remains the same.
- iv. Time-variant: data is tracked and stored according to a specific time period, such as a fiscal quarter or year.
- v. Read-intensive: data is primarily used for reporting and analysis.
- vi. Scalable: data warehouse is designed to handle large amounts of data and accommodate future growth.
- vii. Data-driven: A data warehouse is designed to prioritize the management and analysis of data, rather than the specific applications that utilize the data.
- viii. Provides historical perspective: Data warehouse provides data that is kept over a long period of time and can be used to track trends and patterns.

14. A star schema is a specific way of organizing data in a database. The central table, known as the fact table, which is linked to many dimension tables. The fact table holds quantitative information such as measurements or metrics while the dimension tables store descriptive attributes that relate to the data. The design of the scheme is named as "star" because when observed, it resembles a star with the fact table at the center and dimension tables coming out from it.



This type of schema is commonly used in data warehousing.

15. SETL stands for Set-oriented Programming Language. It is a programming language that is designed to operate on sets of data, rather than on individual elements. SETL is often used in data-warehousing and OLAP (Online Analytical Processing) applications to efficiently manipulate and analyse large sets of data. It is used for data mining, data warehousing, and other applications that require large-scale data manipulation. The language is based on the mathematical theory of sets.