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. Data is organised and kept in a central location called a data warehouse. With the help of reporting, analytics, and data mining, this kind of storage is frequently utilised in business intelligence. Before being put into a warehouse, data is frequently gathered from many sources and standardised. ETL is the name given to this procedure (extract, transform, load). For analysing corporate operations and making data-driven choices, data warehouses are useful tools.

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. A data warehouse has a number of properties, including:

    i. Subject-oriented: Information is arranged and saved in accordance with certain topics, such sales, or inventories.

    ii. Integrated: Data that has been rendered consistent and intelligible after being combined from many, unrelated sources.

    iii. Non-volatile: After being placed into the data warehouse, the data does not alter.

    iv. Time-variant: Information is monitored and saved in accordance with a predetermined time frame, such as a fiscal quarter or year .Data is mostly utilised for reporting and analysis, making it quite read-intensive.

    vi. Scalable: Data warehouses are built to manage massive volumes of data and expand with the company.

    vii. Data-driven: Rather than focusing on the particular applications that use the data, a data warehouse is made to emphasise the administration and analysis of data.

viii. Provides historical perspective: - Data warehouses offer data that is stored for a long time and may be used to identify patterns and trends.

13. A star schema is a particular type of database organisation. The fact table, which serves as the primary table and is connected to several dimension tables. While the dimension tables retain descriptive properties that connect to the data, the fact table contains numerical data, such as measurements or metrics. The "star" in the scheme's name refers to how the fact table and dimension tables are arranged such that, when seen from above, they resemble a star.
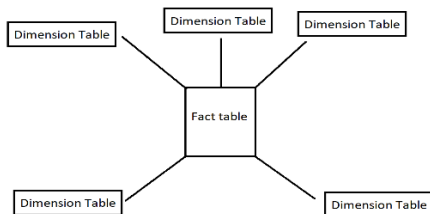
This type of scheme is commonly used in data warehousing.

14. SETL stands for Set-oriented Programming Language. It is a type of programming language that works better with collections of data than with individual pieces. To effectively manage and analyse massive amounts of data, SETL is frequently used in OLAP (Online Analytical Processing) applications and data-warehousing systems. It is employed in data warehousing, data mining, and other applications that need for extensive data modification. The theory of sets in mathematics serves as the language's foundation.