

# SQL Worksheets

1. A,D
2. A,B,C
3. B
4. B
5. A
6. C
7. B
8. B
9. C
10. C
11. Data warehousing is a system used for reporting and data analysis. These are the central repositories of integrated data from one or more disparate sources. Data warehouse helps users to access critical data from different sources in a single place so it saves users time of retrieving data information from multiple sources.
12. OLTP(Online Transaction Processing) and OLAP(Online Analytical Processing)

OLTP	OLAP
Responsible for collecting, Storing and processing data from the transactions in real-time	Responsible for analyzing data from OLTP systems using queries.
Operational data(original data source)	Consolidated data(comes from OLTP databases)
Queries are standard and straight forward	Complex queries
Processing speed is fast	Low processing speed
Uses traditional DBMS	Uses a data warehouse
Detailed organization of data	Disorganised data

13. The characteristics of Data warehouse are:

**Subject oriented:**

A data warehouse is always a subject oriented as it delivers information about a theme instead of organization's current operations. It can be achieved on specific theme.

A data warehouse never put emphasis only current operations. Instead, it focuses on demonstrating and analysis of data to make various decision.

**Integrated:**

Integration means founding a shared entity to scale the all similar data from the different databases. The data also required to be resided into various data warehouse in shared and generally granted manner.

**Time variant:**

Data is maintained via different intervals of time such as weekly, monthly, or annually etc. It finds various time limit which are structured between the large datasets and are held in online transaction process (OLTP). The time limits for data warehouse is wide-ranged than that of operational systems.

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## **Non-volatile:**

As the name defines the data resided in data warehouse is permanent. It also means that data is not erased or deleted when new data is inserted. It includes the mammoth quantity of data that is inserted into modification between the selected quantity on logical business. It evaluates the analysis within the technologies of warehouse.

14. The star schema is the simplest style of data mart schemas and is the approach most widely used to develop data warehouses and dimensional data marts. The star schema consists of one or more fact tables referencing any number of dimension tables. The star schema is more effective for handling simpler queries.
15. SETL(SET Language) is a very high-level programming language based on the mathematical theory of sets. SETL provides two basic aggregate data types: unordered sets and sequences