

WORKSHEET 1 SQL

Q1 and Q2 have one or more correct answer. Choose all the correct option to answer your question.

1. Which of the following is/are DDL commands in SQL?
- | | |
|-----------|-----------|
| A) Create | B) Update |
| C) Delete | D) ALTER |

Ans: A)

2. Which of the following is/are DML commands in SQL?
- | | |
|-----------|-----------|
| A) Update | B) Delete |
| C) Select | D) Drop |

Ans: A)Update B) Delete

Q3 to Q10 have only one correct answer. Choose the correct option to answer your question.

3. Full form of SQL is:
- | | |
|----------------------------|------------------------------|
| A) Strut querying language | B) Structured Query Language |
| C) Simple Query Language | D) None of them |

Ans: B)

4. Full form of DDL is:
- | | |
|----------------------------------|-----------------------------|
| A) Descriptive Designed Language | B) Data Definition Language |
| C) Data Descriptive Language | D) None of the above. |

Ans: B)

5. DML is:
- | | |
|-------------------------------|-----------------------------|
| A) Data Manipulation Language | B) Data Management Language |
| C) Data Modeling Language | D) None of these |

Ans: A)

6. Which of the following statements can be used to create a table with column B int type and C float type?
- | | |
|-----------------------------------|------------------------------|
| A) Table A (B int, C float) | B) Create A (b int, C float) |
| C) Create Table A (B int,C float) | D) All of them |

Ans: C)

7. Which of the following statements can be used to add a column D (float type) to the table A created above?
- | | |
|--------------------------------------|-------------------------------------|
| A) Table A (D float) | B) Alter Table A ADD COLUMN D float |
| C) Table A(B int, C float, D float) | D) None of them |

Ans: B)

8. Which of the following statements can be used to drop the column added in the above question?
- | | |
|--------------------|--------------------------------|
| A) Table A Drop D | B) Alter Table A Drop Column D |
| C) Delete D from A | D) None of them |

Ans:B)

- Ans: D)

- Ans:A)

A data warehouse centralizes and consolidates large amounts of data from multiple sources. Its analytical capabilities allow organizations to derive valuable business insights from their data to improve decision-making. Over time, it builds a historical record that can be invaluable to data scientists and business analysts. Because of these capabilities, a data warehouse can be considered an organization's "single source of truth."

The two terms look similar but refer to different kinds of systems. Online transaction processing (OLTP) captures, stores, and processes data from transactions in real time. Online analytical processing (OLAP) uses complex queries to analyze aggregated historical data from OLTP systems.

Characteristics of a Data Warehouse. The four characteristics of a data warehouse, also called features of a data warehouse, include SUBJECT ORIENTED, TIME VARIANT, INTEGRATED and NON-VOLATILE.

14. What is Star-Schema??

Star schema is the fundamental schema among the data mart schema and it is simplest. This schema is widely used to develop or build a data warehouse and dimensional data marts. It includes one or more fact tables indexing any number of dimensional tables. The star schema is a necessary cause of the snowflake schema. It is also efficient for handling basic queries.

It is said to be star as its physical model resembles to the star shape having a fact table at its center and the dimension tables at its peripheral representing the star's points. Below is an example to demonstrate the Star Schema:

15. What do you mean by SETL?

ETL is a process that extracts the data from different source systems, then transforms the data (like applying calculations, concatenations, etc.) and finally loads the data into the Data Warehouse system. Full form of ETL is Extract, Transform and Load.

It's tempting to think a creating a Data warehouse is simply extracting data from multiple sources and loading into database of a Data warehouse. This is far from the truth and requires a complex ETL process. The ETL process requires active inputs from various stakeholders including developers, analysts, testers, top executives and is technically challenging.