

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

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
C) Simple Query Language
ANS : B) Structured Query Language
B) Structured Query Language
D) None of them
4. Full form of DDL is:
A) Descriptive Designed Language
C) Data Descriptive Language
ANS : B) Data Definition Language
B) Data Definition Language
D) None of the above.
5. DML is:
A) Data Manipulation Language
C) Data Modeling Language
ANS: A) Data Manipulation Language
B) Data Management Language
D) None of these
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)
C) Create Table A (B int, C float)
ANS : B) Create A (b int, C float)
B) Create A (b int, C float)
D) All of them
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)
C) Table A(B int, C float, D float)
ANS: Table A (D float)
B) Alter Table A ADD COLUMN D float
D) None of them
8. Which of the following statements can be used to drop the column added in the above question?
A) Table A Drop D
C) Delete D from A
ANS : D) None of them
B) Alter Table A Drop Column D
D) None of them
9. Which of the following statements can be used to change the data type (from float to int) of the column D of table A created in above questions?
A) Table A (D float int)
C) Alter Table A D float int
ANS. B) Alter Table A Alter Column D int
B) Alter Table A Alter Column D int
D) Alter table A Column D float to int
10. Suppose we want to make Column B of Table A as primary key of the table. By which of the following statements we can do it?
A) Alter Table A Add Constraint Primary Key B
C) Alter Table A Add Primary key B
B) Alter table (B primary key)
D) None of them

ANS : Alter table(B primary key)

Q11 to Q15 are subjective answer type questions, Answer them briefly.

11. What is data-warehouse?

ANS: A data warehouse is a central repository of information that can be analyzed to make more informed decisions. Data flows into a data warehouse from transactional systems, relational databases, and other sources, typically on a regular cadence.

12. What is the difference between OLTP VS OLAP?

ANS: **OLTP-**

Characteristics- Handles a large number of small transactions

Query types - Simple standardized queries

Operations -Based on INSERT, UPDATE, DELETE commands

Response time -Milliseconds

Design Industry -specific, such as retail, manufacturing, or banking

Backup and recovery- Regular backups required to ensure business continuity and meet legal and governance requirements

Productivity- Increases productivity of end users

OLAP-

Characteristics- Handles large volumes of data with complex queries

Query types- Complex queries

Operations - Based on SELECT commands to aggregate data for reporting

Response time- Seconds, minutes, or hours depending on the amount of data to process

Design - Subject-specific, such as sales, inventory, or marketing

Backup and recovery- Lost data can be reloaded from OLTP database as needed in lieu of regular backups

Productivity- Increases productivity of business managers, data analysts, and executives

13. What are the various characteristics of data-warehouse?

ANS- **4 Characteristics of data – warehouse**

Subject-oriented: A data warehouse typically provides information on a topic (such as a sales inventory or supply chain) rather than company operations.

Time-variant: Time variant keys (e.g., for the date, month, time) are typically present.

Integrated: A data warehouse combines data from various sources. These may include a cloud, relational databases, flat files, structured and semi-structured data, metadata, and master data. The sources are combined in a manner that's consistent, reliable, and ideally certifiable, providing a business with confidence in the data's quality.

Persistent and non-volatile: Prior data isn't deleted when new data is added. Historical data is preserved for comparisons, trends, and analytics.

14. What is Star-Schema??

ANS- A star schema is a multi-dimensional data model used to organize data in a database so that it is easy to understand and analyze. Star schemas can be applied to data warehouses, databases, data marts, and other tools. The star schema design is optimized for querying large data sets.

15. What do you mean by SETL?

ANS- SETL (SET Language) is a very high-level programming language based on the mathematical theory of sets.

