

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

2. Which of the following is/are DML commands in SQL?

- A) Update B) Delete
- C) Select 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 B) Structured Query Language
- C) Simple Query Language D) None of them

4. Full form of DDL is:

- A) Descriptive Designed Language B) Data Definition Language
- C) Data Descriptive Language D) None of the above.

5. DML is:

- A) Data Manipulation Language B) Data Management Language
- C) Data Modeling 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) B) Create A (b int, C float)
- C) Create Table 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) B) Alter Table A ADD COLUMN D float
- C) Table A(B int, C float, 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 B) Alter Table A Drop Column D
- C) Delete D from A 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) B) Alter Table A Alter Column D int
- C) Alter Table A D float 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 B) Alter table (B primary key)
- C) Alter Table A Add Primary key B D) None of them

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

11. What is data-warehouse?

A data warehouse is a large collection of business data used to help an organization make decisions. The concept of the data warehouse has existed since the 1980s, when it was developed to help transition data from merely powering operations to fueling decision support systems that reveal business intelligence.

12. What is the difference between OLTP VS OLAP?

OLAP (Online analytical processing)	OLTP (Online transaction processing)
Consists of historical data from various Databases.	Consists only operational current data.
It is subject oriented. Used for Data Mining, Analytics, Decision making,etc.	It is application oriented. Used for business tasks.
The data is used in planning, problem solving and decision making.	The data is used to perform day to day fundamental operations.
It reveals a snapshot of present business tasks.	It provides a multi-dimensional view of different business tasks.
Large amount of data is stored typically in TB, PB	The size of the data is relatively small as the historical data is archived. For ex MB, GB
Relatively slow as the amount of data involved is large. Queries may take hours.	Very Fast as the queries operate on 5% of the data.
It only need backup from time to time as compared to OLTP.	Backup and recovery process is maintained religiously
This data is generally managed by CEO, MD, GM.	This data is managed by clerks, managers.
Only read and rarely write operation.	Both read and write operations.

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

- Some data is denormalized for simplification and to improve performance
- Large amounts of historical data are used
- Queries often retrieve large amounts of data
- Both planned and ad hoc queries are common
- The data load is controlled

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 case 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.

In Star Schema, Business process data, that holds the quantitative data about a business is distributed in fact tables, and dimensions which are descriptive characteristics related to fact data. Sales price, sale quantity, distant, speed, weight, and weight measurements are few examples of fact data in star schema. Often, A Star Schema having multiple dimensions is termed as Centipede Schema. It is easy to handle a star schema which have dimensions of few attributes.

15. What do you mean by SETL?

Short for *Set Theory as a Language* (or Set Language), SETL is a high-level programming language that’s based on the mathematical theory of sets. It was developed in the early 1970’s by mathematician Professor J. Schwartz. SETL is an interpreted language with a syntax that is resembles C and in many cases similar to Perl. In SETL every statement is terminated by a semicolon. Variable names are case-insensitive and are automatically determined by their last assignment.