

SQL Worksheet 1

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
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
11. What is data-warehouse?
12. What is the difference between OLTP VS OLAP?
13. What are the various characteristics of data-warehouse?
14. What is Star-Schema??
15. What do you mean by SETL?

Answer: 1 a) create and d) alter

Answer: 2 a) Update and b) Delete

Answer: 3 b) Structured Query Language

Answer: 4 b) Data Definition Language

Answer: 5 a) Data Manipulation Language

Answer: 6 C) Create Table A (B int,C float)

Answer: 7 b)

Answer: 8 b)

Answer: 9 b)

Answer: 10 a)

Answer: 11 A Data Warehousing (DW) is process for collecting and managing data from varied sources to provide meaningful business insights. A Data warehouse is typically used to connect and analyze business data from heterogeneous sources. The data warehouse is the core of the BI system which is built for data analysis and reporting. It is a blend of technologies and components which aids the strategic use of data. It is electronic storage of a large amount of information by a business which is designed for query and analysis instead of transaction processing. It is a process of transforming data into information and making it available to users in a timely manner to make a difference.

Answer: 12 Online Analytical Processing (OLAP): Online Analytical Processing consists of a type of software tools that are used for data analysis for business decisions. OLAP provides an environment to get insights from the database retrieved from multiple database systems at one time. **Examples** – Any type of Data warehouse system is an OLAP system. The uses of OLAP are as follows:

- Spotify analyzed songs by users to come up with a personalized homepage of their songs and playlist.
- Netflix movie recommendation system.

Online transaction processing (OLTP): Online transaction processing provides transaction-oriented applications in a 3-tier architecture. OLTP administers the day-to-day transactions of an organization.

Examples: Uses of OLTP are as follows:

- ATM center is an OLTP application.
- OLTP handles the ACID properties during data transactions via the application.
- It's also used for Online banking, Online airline ticket booking, sending a text message, add a book to the shopping cart.

Answer: 13 The four characteristics of a data warehouse, also called features of a data warehouse, include SUBJECT ORIENTED, TIME VARIANT, INTEGRATED and NON-VOLATILE.

Answer: 14 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.

Introduced by Ralph Kimball in the 1990s, star schemas are efficient at storing data, maintaining history, and updating data by reducing the duplication of repetitive business definitions, making it fast to aggregate and filter data in the data warehouse.

Answer: 15 SETL (SET Language) is a very high-level programming language based on the mathematical theory of sets. It was originally developed by (Jack) Jacob T.