

## SQL Worksheet

1) Which of the following is/are DDL commands in SQL?

Ans : Create and Alter

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

Ans : Update and Delete

3) Full form of SQL is:

Ans : Structured Query Language

4) Full form of DDL is:

Ans : Data Definition Language

5) DML is:

Ans : Data Manipulation Language

6) Which of the following statements can be used to create a table with column B int type and C float type?

Ans : Create Table A (B int, C float)

7) Which of the following statements can be used to add a column D (float type) to the table A created above?

Ans : Alter Table A ADD COLUMN D float

8) Which of the following statements can be used to drop the column added in the above question?

Ans : Alter Table A Drop Column D

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?

Ans : 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?

Ans : None of them

11. What is data-warehouse?

Ans : A data warehouse is a relational database that is designed for query and analysis rather than for transaction processing. It usually contains historical data derived from transaction data, but it can include data from other sources. It separates analysis workload from transaction workload and enables an organization to consolidate data from several sources.

12. What is the difference between OLTP VS OLAP?

Ans : OLAP:

It is used for data analysis and is used data warehouse.OLAP manages all insert,update and delete transaction.Tables in OLAP database are not normalised.Queries touch large amounts of data.OLAP uses information in database to guide startegic decision.

OLTP :

OLTP or Online Transaction Processing is a type of data processing that consists of executing a number of transactions occurring concurrently—online banking, shopping, order entry, or sending text messages, for example. These transactions traditionally are referred to as economic or financial transactions, recorded and secured so that an enterprise can access the information anytime for accounting or reporting purposes.

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

Ans : Characteristics of data warehouse are:

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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. That means the data warehousing process is proposed to handle with a specific theme which is more defined. These themes can be sales, distributions, marketing etc.

Integrated –

It is somewhere same as subject orientation which is made in a reliable format. 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 –

In this data is maintained via different intervals of time such as weekly, monthly, or annually etc. It founds 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. The data resided in data warehouse is predictable with a specific interval of time and delivers information from the historical perspective. It comprises elements of time explicitly or implicitly. Another feature of time-variance is that once data is stored in the data warehouse then it cannot be modified, alter, or updated.

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)What is Star-Schema?

Ans : A star schema is a database organizational structure optimized for use in a data warehouse or business intelligence that uses a single large fact table to store transactional or measured data, and one or more smaller dimensional tables that store attributes about the data. It is called a star schema because the fact table sits at the center of the logical diagram, and the small dimensional tables branch off to form the points of the star. The fact table stores two types of information: numeric values and dimension attribute values. Using a sales database as an example: Numeric value cells are unique to each row or data point and do not correlate or relate to data stored in other rows. These might be facts about a transaction, such as an order ID, total amount, net profit, order quantity or exact time. The dimension attribute values do not directly store data, but they store the foreign key value for a row in a related dimensional table. Many rows in the fact table will reference this type of information. So, for example, it might store the sales employee ID, a date value, a product ID or a branch office ID.

15. What do you mean by SETL?