***SQL DATASET***

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

A) Create

B) Update

C) Delete

D) ALTER

Answer – A) & D).

CREATE - Used for creating database objects like a database and a database table.

ALTER - Used for modifying and renaming elements of an existing database table.

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

A) Update

B) Delete

C) Select

D) Drop

Answer – A), B) & C). Update, Delete & Select.

3. Full form of SQL is:

A) Strut querying language

B) Structured Query Language

C) Simple Query Language

D) None of them

Answer – B). Structured Query Language

4. Full form of DDL is:

A) Descriptive Designed Language

B) Data Definition Language

C) Data Descriptive Language

D) None of the above.

Answer – B). Data Definition Language

5. DML is:

A) Data Manipulation Language

B) Data Management Language

C) Data Modeling Language

D) None of these

Answer – A). 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?

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

Answer – C). 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?

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

Answer- B). 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?

A) Table A Drop D

B) Alter Table A Drop Column D

C) Delete D from A

D) None of them

Answer – B). 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?

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

Answer – 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

Answer – A). Alter Table A Add Constraint Primary Key B.

Q.11. What is data-warehouse?

Answer - 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 process of transforming data into information and making it available to users in a timely manner to make a difference. Data warehousing involves data cleaning, data integration, and data consolidations.

12. What is the difference between OLTP VS OLAP?

Answer –

|  |  |
| --- | --- |
| 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. |
| 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 |
| Only read and rarely write operation. | Both read and write operations. |
| **Example** – Netflix movie recommendations systems. | **Example** – ATM center.  Also used for online banking, Online air ticket booking, sending a message etc. |

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

Answer – There are 4 major characteristics of Data Warehouse.

1). Subject Oriented 2). Integrated 3). Time variant 4). Non-Volatile.

1). **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.

2). **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.

3). **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 data resided in data warehouse is predictable with a specific interval of time and delivers information from the historical perspective. Another feature of time-variance is that once data is stored in the data warehouse then it **cannot be modified, alter, or updated**.

4). **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?

Answer- **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.

15. What do you mean by SETL?

Answer - **Set Theory as a Language**

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.