WORKSHEET 1 SQL

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

A) Create B) Update

C) Delete D) ALTER

SOLUTION: A, D

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

A) Update B) Delete

C) Select D) Drop

SOLUTION: A, B

3. Full form of SQL is:

A) Strut querying language B) Structured Query Language

C) Simple Query Language D) none of them

SOLUTION: B

4. Full form of DDL is:

A) Descriptive Designed Language B) Data Definition Language

C) Data Descriptive Language D) None of the above.

SOLUTION: B

5. DML is:

A) Data Manipulation Language B) Data Management Language

C) Data Modeling Language D) None of these

SOLUTION: A

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

SOLUTION: C

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

SOLUTION: B

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

SOLUTION: B

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

SOLUTION: B

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

SOLUTION: C

11. What is data-warehouse?

ANSWER:

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. The large amount of data in data warehouses comes from different places such as internal applications such as marketing, sales, and finance; customer-facing apps; and external partner systems, among others.

On a technical level, a data warehouse periodically pulls data from those apps and systems; then, the data goes through formatting and import processes to match the data already in the warehouse. The data warehouse stores this processed data so it's ready for decision makers to access. How frequently data pulls occur, or how data is formatted, etc., will vary depending on the needs of the organization.

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.
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?

ANSWER:

The Key Characteristics of a 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??

ANSWER:

A star schema is the elementary form of a dimensional model, in which data are organized into facts and dimensions. A fact is an event that is counted or measured, such as a sale or log in. A dimension includes reference data about the fact, such as date, item, or customer.
A star schema is a relational schema where a relational schema whose design represents a multidimensional data model. The star schema is the explicit data warehouse schema. It is known as star schema because the entity-relationship diagram of this schema simulates a star, with points, diverge from a central table. The center of the schema consists of a large fact table, and the points of the star are the dimension tables.

15. What do you mean by SETL?

ANSWER:

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.