WORKSHEET SET-1 SQL

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

A) Create B) Update
C) Delete D) ALTER

Answer : B) Update

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

A) Update B) Delete
C) Select D) Drop

Answer : D) Drop

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 : B) Create 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 : Alter Table A Alter Column D 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 : C) Alter Table A Add Primary key B

11. What is data-warehouse?

A. A data warehouse is a central repository of information that can be analyzed to make more informed decisions. Data flows into a data warehouse from transactional systems, relational databases, and other sources. Business analysts, data engineers, data scientists, and decision makers access the data through business intelligence (BI) tools, SQL clients, and other analytics applications.

12. What is the difference between OLTP VS OLAP?

A. An OLTP system captures and maintains transaction data in a database. Each transaction involves individual database records made up of multiple fields or columns. Examples include banking and credit card activity or retail checkout scanning. In OLTP, the emphasis is on fast processing, because OLTP databases are read, written, and updated frequently. If a transaction fails, built-in system logic ensures data integrity.

OLAP applies complex queries to large amounts of historical data, aggregated from OLTP databases and other sources, for data mining, analytics, and business intelligence projects. In OLAP, the emphasis is on response time to these complex queries. Each query involves one or more columns of data aggregated from many rows. Examples include year-over-year financial performance or marketing lead generation trends. OLAP databases and data warehouses give analysts and decision-makers the ability to use custom reporting tools to turn data into information. Query failure in OLAP does not interrupt or delay transaction processing for customers, but it can delay or impact the accuracy of business intelligence insights.

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

Characteristics of Data Warehouse :

1. **A. Subject-oriented**: A data warehouse typically provides information on a topic (such as a sales inventory or supply chain) rather than company operations.
2. **Time-variant**: Time variant keys (e.g., for the date, month, time) are typically present.
3. **Integrated**: A data warehouse combines data from various sources. These may include a cloud, relational databases, flat files, structured and semi-structured data, metadata, and master data. The sources are combined in a manner that’s consistent, relatable, and ideally certifiable, providing a business with confidence in the data’s quality.
4. **Persistent and non-volatile**: Prior data isn’t deleted when new data is added. Historical data is preserved for comparisons, trends, and analytics

14. What is Star-Schema??

A. 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.

15. What do you mean by SETL?

A. Set theory programming language is a programming paradigm based on mathematical set theory. One example of a programming language based on this paradigm is SETL. The goal of set theoretic programming is to improve programmer speed and productivity significantly, and also enhance program clarity and readability.