# **WORKSHEET 1 SQL**

Q1 and Q2 have one or more correct answer. Choose all the correct option to answer your question.

- 1. Which of the following is/are DDL commands in SQL?
- D) ALTER
- 2. Which of the following is/are DML commands in SQL?
- B) Delete
- Q3 to Q10 have only one correct answer. Choose the correct option to answer your question.
- 3. Full form of SQL is:
- B) Structured Query Language
- 4. Full form of DDL is:
- B) Data Definition Language
- 5. DML is:
- 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?
- 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?

- 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?
- 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

Dof table A created in above questions?

- B) 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)

# Q11 to Q15 are subjective answer type questions, Answer them briefly.

### 11. What is data-warehouse?

**Ans.** A Data Warehousing is a process for collecting and managing data from different sources to provide meaningful business insights.

A Data warehouse is typically used to connect and analyse business data from different sources. The data warehouse is the core of the Business intelligence 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.

### **12.** What is the difference between OLTP VS OLAP?

**Table** Tables in OLTP database are normalized.

| Ans. Parameters                              | OLTP  | OLAP  |
|--|---|---|
| Process                                      | It is an online transactional system. It manages database modification. | OLAP is an online analysis and data retrieving process. |
| Characteristic                               | It is characterized by large numbers of short online transactions.      | It is characterized by a large volume of data.          |
| Functionality<br>manage                      | OLTP is an online database modifying ement system.                      | OLAP is an online database query system.                |
| <b>Method</b> OL                             | TP uses traditional DBMS.   | OLAP uses the data warehouse.                           |
| Query Insert, Update, and Delete information |   | Mostly select operations                                |

**Source** OLTP and its transactions are the sources of data. Different OLTP databases become the source of data for OLAP.

Tables in OLAP database are not normalized.

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

**Ans.** Data Warehouse center can be controlled when the client has a common approach to making sense of the patterns that are presented as unambiguous subject. Below are major characteristics of data warehouse:

### 1. Subject-situated -

An information distribution center is dependably a subject situated as it conveys data about a topic rather than association's ongoing tasks. It tends to be accomplished on unambiguous subject. That implies the information warehousing process is proposed to deal with a particular subject which is more characterized. These topics can be deals, conveyances, showcasing and so on.

#### 2. Coordinated -

It is some place same as subject direction which is made in a dependable organization. Coordination implies establishing a common element to scale the all comparative information from the various data sets. The information likewise expected to be lived into different information distribution center in shared and by and large conceded way.

#### 3. Time-Variation -

In this information is kept up with by means of various time periods like week by week, month to month, or every year and so forth. It establishes different time limit which are organized between the huge datasets and are held in web-based exchange process (OLTP). As far as possible for information stockroom is wide-gone than that of functional frameworks.

#### 4. Non-Unstable -

As the name characterizes the information lived in information distribution center is long-lasting. It likewise implies that information isn't eradicated or erased when new information is embedded. It incorporates the mammoth amount of information that is embedded into alteration between the chose amount on legitimate business. It assesses the examination inside the advancements of stockroom.

### **14.** What is Star-Schema??

**Ans.** Star Schema in data warehouse, is a schema in which the center of the star can have one fact table and a number of associated dimension tables.

It is known as star schema as its structure resembles a star.

The Star Schema data model is the simplest type of Data Warehouse schema. It is also known as Star Join Schema and is optimized for querying large data sets.

# **15.** What do you mean by SETL?

**Ans.** SETL (SET Language) is a very high-level programming language based on the mathematical theory of sets.

SETL provides two basic aggregate data types: unordered sets, and sequences (the latter also called tuples).

The elements of sets and tuples can be of any arbitrary type, including sets and tuples themselves. Maps are provided as sets of pairs (i.e., tuples of length 2) and can have arbitrary domain and range types.

Primitive operations in SETL include set membership, union, intersection, and power set construction, among others.

SETL provides quantified Boolean expressions constructed using the universal and existential quantifiers of first-order predicate logic.

SETL provides several iterators to produce a variety of loops over aggregate data structures.