Name of the Assignment: SQL (Worksheet 1)	
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Objective Type Questions:

1. Which of the following is/are DDL commands in SQL?
   A) Create B) Update C) Delete D)

   Ans: A) Create & D) Alter

2. Which of the following is/are DML commands in SQL?
   A) Update B) Delete C) Select D) Drop

   Ans: A) Update & B) Delete

3. Full form of SQL is:
   A) Strut querying language B) Structured Query Language C) Simple Query Language D) None of them

   Ans: 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.

   Ans: B) Data Definition Language

5. DML is:
   A) Data Manipulation Language B) Data Management Language C) Data Modeling Language D) None of these

   Ans: 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

Ans: 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

Ans: 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

Ans: 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

Ans: 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) C) Alter Table A Add Primary key B D) None of them

Ans: A) Alter Table A Add Constraint Primary Key B

Subjective Type Questions:

11. What is data-warehouse?

Ans: A data warehouse is:

- ✓ the central repository of information for data analysis, artificial intelligence, and machine learning.
- ✓ Data flows from different data sources like transactional databases.
- ✓ The data is also updated regularly to make informed decisions on time.
- ✓ A data warehouse may contain multiple databases. Within each database, data is organized into tables and columns. Within each column, you can define a description of the data, such as integer, data field, or string.

12. What is the difference between OLAP and OLTP?

Ans: Difference between OLAP and OLTP:

S.No.	Category	OLAP (Online Analytical Processing)	OLTP (Online Transaction Processing)
1.	Definition	It is well-known as an online database query management system.	It is well-known as an online database modifying system
2.	Data Source	Consists of historical data from various Databases.	Consists of only of operational current data.
3.	Method Used	It makes use of a Data Warehouse	It makes use of a standard database management system (DBMS).
4.	Normalized	In an OLAP database, tables are not normalized.	In an OLTP database, tables are normalized.

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

Ans: Characteristics of a Data Warehouse:

- ***Subject Oriented***: Analysis of the data for the decision makers of a business can be done easily by constricting to a particular subject area of the Data warehouse. This makes understanding and analysis of the data concise and straightforward by excluding the unwanted information on some subject that is not needed for decision-making.

- ***Integrated*** : Data warehouses consist of data from different variable sources integrated under one platform. This data obtained is extracted and transformed maintaining uniformity without depending on the source it was obtained from; this feature is known as Integrated.

- ***Time Variant*** : It keeps the huge volume of data from all databases stored in accordance with the elements of time. It consists of a temporal element and extensive time horizon. Inability to change the element of time is an essential aspect of time variance. Record key is used to display time variance.

- ***Non-Volatile*** : Data is updated by uploading data in the data warehouse to protect data from momentary changes. This means that once a data is fed, there can be no alteration or changes made. The inability to be erased is called the non-volatile character of the data warehouse environment. Data is read only and allows only two functions to be performed: Access and Loading.

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 easy to handle a star schema which have dimensions of few attributes.

Sales price, sale quantity, distant, speed, weight, and weight measurements are few examples of fact data in star schema.

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.
- 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.

********** ****The End **********